Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	A	Common	5	1	Job Reference (optional)	158937608

TCDL

BCLL

BCDL

1)

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:30 ID:ysriNNSpFYpPvsIQK2kzJ8z6RFw-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1





Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	A1	Common	1	1	Job Reference (optional)	158937609

Loading

TCDL

BCLL

BCDL

WEBS

OTHERS

SLIDER

FORCES

WEBS

NOTES

1)

LUMBER

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:32 ID:iaqTRASNrk3Dfzi4s8B7MRz6RC2-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

1111111111

mm June 14,2023

818 Soundside Road Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	A2	Common	1	1	Job Reference (optional)	158937610

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:33

Page: 1





Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	A2GE	Common Supported Gable	1	1	Job Reference (optional)	158937611

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:33 ID:c9VqEHTKX3tTR4AsVHRVNAz6RSp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Scale = 1:61.7

Plate Offsets (X, Y): [2:0-2-8,0-3-5], [8:0-2-4,0-2-4], [13:0-2-8,Edge], [18:0-2-4,0-2-4]

Loading TCLL (roof) Snow (Pf) TCDL BCLL		(psf) 20.0 20.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018/TPI2014		CSI TC BC WB Matrix-MSH	0.18 0.07 0.22	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 24	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190	
BCDL		10.0	oodo										Weight: 225 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS SLIDER BRACING TOP CHORD BOT CHORD WEBS REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Left 2x4 S Structural 6-0-0 oc p Rigid ceili bracing. 1 Row at (size)	o.2 o.2 o.3 o.3 SP No.3 l wood she burlins, exing directly midpt 2=32-11-(25=32-11) 27=32-11 30=32-11 37=32-11 37=32-11 39=32-11 41=32-11 2=-37 (LC 26=-26 (L 28=-43 (L 31=-72 (L 35=-41 (L 38=-43 (L 40=-30 (L 42=-37 (L)	1-6-0 athing directly applie cept end verticals. applied or 10-0-0 oc 12-33, 14-32 0, 24=32-11-0, -0, 26=32-11-0, -0, 35=32-11-0, -0, 35=32-11-0, -0, 35=32-11-0, -0, 40=32-11-0, -0, 40=32-11-0, -0, 40=32-11-0, -0, 40=32-11-0, -0, 40=32-11-0, -0, 40=32-11-0, -0, 40=32-11-0, -10, 25=-105 (LC 142) C 15), 32=-48 (LC 142) C 15), 34=-64 (LC 142) C 14), 37=-44 (LC 142) C 14), 41=-92 (LC 142) C 10)	d or FORCES TOP CHORE BOT CHORE () () () (), (), (), (), (), (), (), ()		lax Grav 2=168 (25=179) 27=161 30=206 32=204 34=239 37=160 39=162 41=190 (lb) - Maximum Co Tension 1-2=0/23, 2-4=-16: 5-6=-109/114, 6-7: 9-10=-79/226, 10- 11-12=-109/31, 1 13-14=-99/285, 14 15-16=-85/268, 16 17-19=-52/180, 19 20-21=-53/95, 21- 23-24=-30/145 2-41=-19/87, 30- 27-28=-19/87, 30- 27-28=	LC 25), 2 (LC 35), (LC 35), (LC 35), (LC 22), (LC 22), (LC 21), (LC 22), (LC 21), (LC 34), (LC 34), (LC 34), (LC 34), (LC 34), (LC 34), (LC 34), (LC 34), (LC 34), (LC 34), (L	24=104 (LC 2 26=156 (LC 28=160 (LC 33=207 (LC 35=206 (LC 35=206 (LC 40=151 (L	/7), 1), 35), 22), 21), 21), 21), 21), 25) 0, /70, 87, /116,	 2) W Va Va Ca zco 2- (2) zco ar m M gr or se or 3) T T Pl DO C3 5) Ur de 	ind: ASC asd=103m at. II; Exp ne and C 5-8 to 14. N) 20-5-8 me; cantil dd right ey WFRS foi ip DOL=1 russ desia dy. For s ee Standa consult c CLL: ASC ate DOL=1.15) is=1.00; C balanced sign.	F 7-16 F	; Vult=130mph (CDL=6.0psf; BC closed; MWFRS mer(3E) -0-10-8 orner(3R) 14-2- 5-12, Corner(3R) ;C-C for member ons shown; Lun provind loads in sposed to wind (ustry Gable End d building desig ;; Pr=20.0 psf (Lu); Rough Cat B; loads have been OR FESS SEA 0363	3-second gust DL=6.0psf; h= (envelope) ex to 2-5-8, Exte 0 to 20-5-8, Ex 1 29-5-12 to 3 sed ; end veri rs and forces iber DOL=1.60 the plane of th normal to the Details as app ner as per ANS tof LL: Lum DO m DOL=1.15 F Fully Exp.; Ce n considered f) 25ft; terior rior(2N) terior 2-9-4 ical left &) plate e truss for this ical left ical left
				NOTES 1) Unbalan this desig	ced gn.	roof live loads hav	ve been o	considered fo	r				A C A	EER	LINE .



G mmm June 14,2023

Continued on page 2

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	A2GE	Common Supported Gable	1	1	Job Reference (optional)	158937611

- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- 9) Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 37 lb uplift at joint 2, 64 lb uplift at joint 34, 41 lb uplift at joint 35, 44 lb uplift at joint 37, 43 lb uplift at joint 38, 47 lb uplift at joint 39, 30 lb uplift at joint 40, 92 lb uplift at joint 41, 72 lb uplift at joint 31, 39 lb uplift at joint 30, 43 lb uplift at joint 28, 48 lb uplift at joint 27, 26 lb uplift at joint 26, 105 lb uplift at joint 25 and 37 lb uplift at joint 2.
- Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 42.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:33 ID:c9VqEHTKX3tTR4AsVHRVNAz6RSp-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 2



Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	A2T	Roof Special	5	1	Job Reference (optional)	158937612

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:34 ID:JytbNuZnd6otqdHa6Vz?Okz6RMF-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1





Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	ASE	Common	1	1	Job Reference (optional)	158937613

Run: 8.63 E Nov 21 2022 Print: 8.630 E Nov 21 2022 MiTek Industries, Inc. Wed Jun 14 11:09:12 ID:Z?RrRUUawrsjRX0WcdE8aMz6RDJ-hMI7eeorhx9yGnO0XhBDdRRILQefppkWr53PBrz6O1L

Page: 1



Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.82 0.99 0.64	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.15 -0.29 0.07	(loc) 27-29 27-29 22	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 241 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 *Excep SP No.2 2x4 SP No.3 Left 2x4 SP No.3 Structural wood she 2-2-0 oc purlins, ex Rigid ceiling directly bracing.	t* 27-7,25-7,23-18:2x I-6-0 athing directly applied cept end verticals. applied or 2-2-0 oc	4 W	OT CHORD 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 1 7 2 2 2 1 1 3 1 1 3 1 1 1 1 1 1 1 1 1 1 1	2-29=-259/2069, 24 2-7-28=-259/2069, 24 26-46=-10/1266, 24 25-47=-9/1268, 24- 23-24=-69/1163 3-27=-501/208, 7-2 5-23=-619/149, 11 2-30=-197/539, 30- 25-31=-189/505, 4- 23-35=-88/1379, 32 8-36=-72/1297, 22 32-33=-11/367, 33- 5-34=-17/387, 7-2	8-29=-2: 27-46=- 6-47=-9, -25=-69, 27=-234, 0-25=-4 -31=-18: -27=-45: 5-36=-6: 5-36=-6: 5-36=-1: -34=-19, -6=0/26:	59/2069, 10/1266, (1268, (1163, (960, 48/197, 3/507, 2/156, 9/1338, 4/374, (382, 2. 17-36=-275	/49.	 Thi loa ove Ove All Ga Thi che Thi che 10) * T on 3-C che 	s truss h d of 12.0 erhangs i plates ai ble studs s truss h ord live lo his truss the botto 6-00 tall ord and a	as bee psf or non-co re 2x4 s space as bee bad nor has be bad nor has be has bad has babad has bad has bad has bad has bad has bad h	In designed for gr 1.00 times flat ro ncurrent with other MT20 unless other ad at 2-0-0 oc. In designed for a nconcurrent with en designed for rd in all areas wh 0-00 wide will fit l er members, with	reater of min roof live of load of 20.0 psf on er live loads. erwise indicated. 10.0 psf bottom any other live loads. a live load of 20.0psf ere a rectangle between the bottom 1 BCDL = 10.0psf.
JOINTS REACTIONS (lb) - FORCES TOP CHORD	1 Brace at Jt(s): 30, 33 All bearings 2-5-8. ex Max Horiz 2=144 (LC Max Uplift All uplift 1 20, 22 ex Max Grav All reactic (s) 21 exc 20=907 (L (lb) - Max. Comp./M (lb) or less except w 2-3=-1137/0, 3-41=- 4-41=-2353/231, 4-5 5-42=-1840/250, 6-4 6-43=-1990/328, 7-4 7-8=-1625/332, 8-44 9-44=-1674/309, 9-1 10-11=-1593/233, 11 12-13=-1647/227, 11 14-15=-1699/203, 11 16-45=-1325/155, 11 17-18=-1253/129, 13	cept 2=0-5-8, 22=0-3- C 18) 00 (lb) or less at joint cept 2=-146 (LC 14) ns 250 (lb) or less at ept 2=1444 (LC 5), C 3), 22=490 (LC 3) ax. Ten All forces 2 hen shown. 2382/207, i=-1954/235, -2=-1805/253, -3=-1892/352, i=-1642/314, 0=-1705/306, 1-12=-1629/235, 3-14=-1666/211, 5-16=-1255/147, 7-45=-1347/146, 3-20=-892/142	8 N (s) 2) joint 50 3) 4)	 OTES Unbalanced i this design. Wind: ASCE Vasd=103mp Cat. II; Exp E zone and C-C 2-5-0 to 14-0 Interior (1) 2C 33-9-8 zone; vertical left ar forces & MW DOL=1.60 pig only. For stu see Standarc or consult qu TCLL: ASCE Plate DOL=1 DOL=1.00; Ct= Unbalanced design. 	7-16; Vult=130mp roof live loads have 7-16; Vult=130mp b; TCDL=6.0psf; E c Enclosed; MWFF C Exterior(2E) -0-1 -10, Exterior(2E) 1 -7-10 to 30-6-0, E cantilever left and nd right exposed; C FRS for reactions ate grip DOL=1.60 med for wind loads ds exposed to wind loads ds exposed to wind loads ds exposed to wind loads the second to be alified building des 7-16; Pr=20.0 psf (15); Pf=20.0 psf (s=1.0; Rough Cat 1.10 snow loads have b	e been of h (3-sec SCDL=6 RS (env 0-8 to 2 (4-0-10) (xterior(2) right ex -C for n shown; in the p d (norm nd Deta signer as (roof LL Lum DC B; Fully been cor	considered for cond gust) .opsf; h=25ft; elope) exterio -5-0, Interior (to 20-7-10, 2E) 30-6-0 to posed ; end nembers and Lumber lane of the tru al to the face) ils as applicat s per ANSI/TP .: Lum DOL=1 DL=1.15 Plate Exp.; Ce=0.9 nsidered for th	r 1) ss 1, 16, 11. 15 ; is				SEA 0363	ROCKATION INTERNET

June 14,2023



Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	В	Common	3	1	Job Reference (optional)	158937614

1)

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:35 ID:WwcS_ow9RvOcm3mRjBta1yz6RCI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



June 14,2023

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Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	B1	Common	6	1	Job Reference (optional)	158937615

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:35 ID:DE5Yhhuboc7FTqi0oB8dWFz6RYk-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

818 Soundside Road Edenton, NC 27932



Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	B1GE	Common Supported Gable	1	1	Job Reference (optional)	158937616

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:35 ID:kEyumvGz1eadDrk1IGCRPHz6RZY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1



Plate Olisets (X, Y): [2:0	-2-8,0-0-5],	[29.0-3-0,0-3-0]										-		
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2	018/TPI2014	CSI TC BC WB Matrix-MSH	0.08 0.07 0.21	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 21	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 192 II	GRIP 244/190	%
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Left 2x4 S Structura 6-0-0 oc Rigid ceil bracing.	lo.2 lo.3 lo.3 SP No.3 1 l wood she purlins, exi ing directly	I-5-14 athing directly applie cept end verticals. applied or 10-0-0 oc	ed or	FORCES TOP CHORD BOT CHORD	(lb) - Maximum Cor Tension 1-2=0/23, 2-3=-71/ 4-5=-91/86, 5-6=-7 8-9=-59/173, 9-10= 11-12=-96/262, 12- 13-14=-59/173, 14- 16-17=-38/83, 17-1 19-20=-109/45, 20- 2-36=-21/105, 35- 34-35=-21/105, 33- 32-33=-21/105, 33-	npressi 41, 3-4= 1/109, 6 -78/220 13=-78, 16=-41, 8=-45/3 21=-72, 6=-21/1 34=-21, 32=-21,	on/Maximum 123/72, 8=-61/133, -, 10-11=-96/2 /220, -, 1/128, -9, 18-19=-66/ /23 05, -, 1/05, -/105, -	: 62, 4 /31, 4	 Tru only see or c TCL Plat DOI Cs= Unb des This load 	uss desig /. For st Standar consult q LL: ASC te DOL= L=1.15); =1.00; Ci aalancec ign. s truss h d of 12.0	gned fo uds ex rd Indu ualifieo E 7-16 1.15); Is=1.0 Is=1.0 I snow as bee psf or	pr wind loads in cposed to wind stry Gable End d building desig ; Pr=20.0 psf (r Pf=20.0 psf (Lu 0; Rough Cat B; loads have been n designed for 1.00 times flat	the plane of normal to th Details as a ner as per A zoof LL: Lum m DOL=1.1 Fully Exp.; an considere greater of m roof load of	i the truss ne face), applicable, NSI/TPI 1. DOL=1.15 5 Plate Ce=0.9; ed for this nin roof live 20.0 psf on
REACTIONS	(size) Max Horiz Max Uplift Max Grav	2=30-5-8, 23=30-5-8 26=30-5-8 29=30-5-8 32=30-5-8 2=330-5-8 2=332 (LC 22=-313 (LC 22=-113 (24=-45 (L 23=-44 (L 33=-44 (L 33=-44 (L 33=-44 (L 33=-44 (L 33=-44 (L 22=128 (L 24=159 (L 24=159 (L 24=159 (L 32=175 (L) 32=175	$\begin{array}{c} 21=30-5-8,\ 22=30-5\\ 8,\ 24=30-5-8,\ 25=30-5\\ 8,\ 27=30-5-8,\ 28=30-5\\ 8,\ 30=30-5-8,\ 31=30-5-5-8,\ 31=30-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5$	5-8, 5-5-8, -5, -5, -5, -5, -5, -5, -5, -5	WEBS NOTES 1) Unbalancec this design. 2) Wind: ASCI Vasd=103rr Cat. II; Exp zone and C 2-2-1 to 12- (2N) 18-6-1 zone; cantil and right ex MWFRS for grip DOL=1	30-31=-21/105, 28 27-28=-21/105, 24 23-24=-21/105, 24 23-24=-21/105, 22 21-22=-21/105, 22 21-22=-21/105 11-29=-166/25, 10 9-31=-188/81, 8-32 5-34=-120/76, 4-35 12-28=-204/70, 13 14-26=-135/76, 16 17-24=-120/74, 18 19-22=-97/143 d roof live loads have 57-16; Vult=130mp ph; TCDL=6.0psf; I B; Enclosed; MWFF -C Corner(3E) -0-10 4-15, Corner(3E) -	30=-21, 27=-21, 25=-21, 30=-20, =-135/7 =-124/8 27=-18, 25=-12, 23=-12, 24=-12, 25=-12	(105, (10,))))))))))))))))))))))))))))))))))))	r78, 06, r 2N) rrior left te	ove 7) All (3) Gat 10) This cho 11) * Th on t 3-0(cho	rhangs r polates ar ple requi ple studs s truss h rd live lc his truss the botto 6-00 tall rd and a	inn-co inn-co e 2x4 res coordinates and nor has bee m cho by 2-0 ny oth	ncurrent with of MT20 unless of ntinuous bottom ed at 2-0-0 oc. en designed for nconcurrent wit een designed for rd in all areas v 00-00 wide will fi er members. I H C SE/ 036	AL	Is. icated. ing. ottom live loads. of 20.0psf angle he bottom

June 14,2023



Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	150007040
23050105-01	B1GE	Common Supported Gable	1	1	Job Reference (optional)	158937616

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:35 ID:kEyumvGz1eadDrk1IGCRPHz6RZY-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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12) ^{N/A}

13) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	С	Roof Special	4	1	Job Reference (optional)	158937617

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries. Inc. Wed Jun 14 09:03:36 ID:IXiJ0Luyki5W8bFrb88Afoz6iod-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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12-6-6 to 19-5-8. Exterior(2E) 19-5-8 to 22-5-8 zone: cantilever left and right exposed : end vertical left and right exposed:C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

2)

 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE
 Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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June 14,2023

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	CGE	Roof Special Supported Gable	1	1	Job Reference (optional)	158937618

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:36 ID:IXiJ0Luyki5W8bFrb88Afoz6iod-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:54 Plate Offsets (X, Y): [2:0-2-8,0-0-5]

L oading TCLL (roof) Snow (Pf) TCDL		(psf) 20.0 20.0 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr	2-0-0 1.15 1.15 YES		CSI TC BC WB	0.10 0.04 0.07	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 15	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20	GRIP 244/190	
BCLL BCDL		0.0* 10.0	Code	IRC2018	3/TPI2014	Matrix-MSH							Weight: 112 lb	FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS SLIDER BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No 2x4 SP No 2x4 SP No 2x4 SP No Left 2x4 S Structural 6-0-0 oc p Rigid ceili bracing. (size)	0.2 0.2 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3 0.3	I-6-14 athing directly applied cept end verticals. applied or 6-0-0 oc 15=21-7-0, 16=21-7-	Or 01 1) 0, 2)	DT CHORD	2-26-8/63, 25-26=- 23-24=-8/63, 22-23= 19-20=-8/63, 18-19= 16-17=-24/84, 15-16 7-22=-143/21, 6-23= 4-25=-139/69, 3-26= 9-19=-185/66, 10-18 12-16=-100/82, 11-1 roof live loads have 7-16; Vult=130mph	8/63, 2 8/63, 8/63, 21/8 21/8 206/7 98/68 3=-146, 7=-13 been ((3-sec	4-25=-8/63, 20-22=-8/63, 17-18=-8/63, 10 4, 5-24=-187/ 78, 5/64 considered for considered for	68, (4,	10) This cho 11) * Th 3-0 cho 12) Pro bea 17, upli 25, upli ion	s truss ha rd live lo his truss the botto 6-00 tall rd and a vide mec vide mec vide glat 19 lb up ft at joint 51 lb up ft at joint t 16	as bee ad nor has be m choi by 2-0 ny oth chanica e capa lift at jo 23, 44 lift at jo 19, 50	en designed for a nconcurrent with een designed for rd in all areas wh 0-00 wide will fit er members. al connection (by able of withstandi bint 15, 72 lb upli 4 lb uplift at joint bint 26, 43 lb upli 0 lb uplift at joint	10.0 psf bot any other liv a live load o iere a rectar between the rothers) of ti ng 18 lb upli ft at joint 2, 24, 44 lb upl ft at joint 20 18 and 72 lb	tom e loads. f 20.0psf igle bottom russ to iff at joint 45 lb lift at joint , 43 lb o uplift at
	Max Horiz Max Uplift	17=21-7-0 20=21-7-0 24=21-7-0 2=-117 (L 2=-72 (LC 16=-72 (L 18=-50 (L 20=-43 (L 24=-44 (L), 18=21-7-0, 19=21-7), 22=21-7-0, 23=21-7), 25=21-7-0, 26=21-7 C 15) : 15), 15=-19 (LC 15), C 15), 17=-18 (LC 15) C 15), 19=-43 (LC 15) C 15), 23=-45 (LC 14) C 14), 25=-44 (LC 14)), -0, -0, -0),),),),), 2)	Vasd=103mp Cat. II; Exp E zone and C-t 2-1-8 to 6-6- 12-6-6 to 19- cantilever lef right expose for reactions DOL=1.60	bh; TCDL=6.0psf; Bi 3; Enclosed; MWFR C Exterior(2E) -0-10 6, Exterior(2R) 6-6-6 5-8, Exterior(2E) 19 t and right exposed d;C-C for members shown; Lumber DO	CDL=6 S (env) -8 to 2 6 to 12 -5-8 to ; end v and for L=1.60	.0psf; h=25ft; elope) exterior -1-8, Interior (-6-6, Interior (-22-5-8 zone; vertical left and rces & MWFR: 	r 1) 1) S	Join 13) Bev suri 26, 14) This Inte R80 LOAD (t 16. veled plat face with 20, 19, 1 s truss is ernationa 02.10.2 a CASE(S)	te or sl truss 18, 16. design Resign Resign nd refe Star	him required to p chord at joint(s) ned in accordanc dential Code sec erenced standar ndard	rovide full b 17, 2, 22, 23 xe with the 2 tions R502.1 d ANSI/TPI	earing , 24, 25, 018 1.1 and 1.
FORCES TOP CHORD	(lb) - Max Tension 1-2=0/23, 4-5=-65/1 7-8=-90/2 10-11=-4 13-14=0/2	26=-51 (L 2=125 (LC 16=140 (L 18=195 (L 20=247 (L 23=246 (L 25=179 (L imum Com 2-3=-38/52 59, 5-6=-7 24, 8-9=-7 24, 8-9=-7 21, 11-1 27, 13-15=-	C 14) C 1, 15=141 (LC 22), C 35), 17=166 (LC 1). C 22), 19=222 (LC 2; C 22), 22=183 (LC 2; C 21), 24=227 (LC 2; C 21), 26=135 (LC 3/ pression/Maximum 2, 3-4=-73/136, 1/184, 6-7=-90/224, 1/180, 9-10=-54/142, 2=-18/55, 12-13=-39/ 1/22/73	3) (2), (2), (4) (5) (6) (33, (7) (8) (9)	Iruss design only. For stu see Standar or consult qu TCLL: ASCE Plate DOL=1.15); Cs=1.00; Ct= Unbalanced design. This truss ha load of 12.0 overhangs n All plates are Gable requir Gable studs	ned for wind loads in ids exposed to wind d Industry Gable En- ialified building desii (7-16; Pr=20.0 psf (.15); Pf=20.0 psf (.15); Pf=20.0 psf (.15); Pf=20.0 psf (.10); Rough Cat E =1.10 snow loads have be us been designed for psf or 1.00 times fla on-concurrent with o 2x4 MT20 unless of es continuous botto spaced at 2-0-0 oc.	n the p (norm d Deta gner as roof LL um DC 3; Fully een cor r great t roof k other lin otherwi m chor	lane of the fru: al to the face) ils as applicab s per ANSI/TP .: Lum DOL=1 DL=1.15 Plate Exp.; Ce=0.9 nsidered for th er of min roof 1 pad of 20.0 ps ve loads. se indicated. d bearing.	ss , ble, 11. .15 ; is live f on		Contraction of the second seco		SEA 0363	L 22 EEER.	. Annoning

June 14,2023



🔺 WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not
a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall
building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing
is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the
fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component
Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	DGE	Common Supported Gable	1	1	Job Reference (optional)	158937619

Scale = 1:40.3

Loading

TCLL (roof)

Snow (Pf)

TCDL

BCLL

BCDL

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:37 ID:mUH0bgkx?JHgiBKEi6sHglz6RWM-RfC?PsB70Hg3NSgPgnL8w3ulTXbGKWrCDoi7J4zJC?f Page: 1



LUMBER TOP CHORD 2x4 SP No.2 2x4 SP No.2 BOT CHORD 2x4 SP No.3 WFBS OTHERS 2x4 SP No.3 BRACING TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals. BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing. **REACTIONS** (size) 12=13-7-0, 13=13-7-0, 14=13-7-0, 15=13-7-0, 16=13-7-0, 17=13-7-0, 18=13-7-0, 19=13-7-0, 20=13-7-0 Max Horiz 20=-141 (LC 12) Max Uplift 12=-59 (LC 11), 13=-93 (LC 15), 14=-58 (LC 15), 15=-60 (LC 15), 17=-60 (LC 14), 18=-58 (LC 14), 19=-104 (LC 14), 20=-96 (LC 10) Max Grav 12=123 (LC 24), 13=133 (LC 25), 14=228 (LC 22), 15=259 (LC 22), 16=165 (LC 27), 17=259 (LC 21), 18=228 (LC 21), 19=154 (LC 12), 20=153 (LC 25) (lb) - Maximum Compression/Maximum FORCES Tension TOP CHORD 2-20=-120/66. 1-2=0/34. 2-3=-104/96. 3-4=-71/76, 4-5=-61/119, 5-6=-82/191. 6-7=-82/191, 7-8=-56/119, 8-9=-50/55 9-10=-72/61, 10-11=0/34, 10-12=-102/54 BOT CHORD 19-20=-62/110, 18-19=-62/110, 17-18=-62/110, 16-17=-62/110, 15-16=-62/110, 14-15=-62/110, 13-14=-62/110, 12-13=-62/110 WEBS 6-16=-137/4, 5-17=-220/106, 4-18=-187/122, 3-19=-103/86, 7-15=-220/106, 8-14=-187/121, 9-13=-92/94 NOTES

- Unbalanced roof live loads have been considered for this design.
 Wind: ASCE 7-16: Vult=130mph (3-second gust)
 - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 3-9-8, Corner(3R) 3-9-8 to 9-9-8, Exterior(2N) 9-9-8 to 11-5-8, Corner(3E) 11-5-8 to 14-5-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 4) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 5) Unbalanced snow loads have been considered for this design.
- 6) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.
- 7) All plates are 2x4 MT20 unless otherwise indicated.
- 8) Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 Gable studs spaced at 2-0-0 oc.
- 11) This truss has been designed for a 10.0 psf bottom
- chord live load nonconcurrent with any other live loads.
 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.

- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 96 lb uplift at joint 20, 59 lb uplift at joint 12, 60 lb uplift at joint 17, 58 lb uplift at joint 18, 104 lb uplift at joint 19, 60 lb uplift at joint 15, 58 lb uplift at joint 14 and 93 lb uplift at joint 13.
- 14) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	DGR	Common Girder	1	2	Job Reference (optional)	158937620

Scale = 1:42.8

Loading

TCLL (roof)

Snow (Pf)

TCDL

BCLL BCDL

Run: 8,63 S Apr 6 2023 Print: 8,630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:37 ID:qvIXtQKgSNSj4jaf4vEm9dz6RVb-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

GRIP

244/190



BCLL BCDL	0.0* 10.0	Code	IRC2018	3/TPI2014	Matrix-MSH			Weight: 168 lb FT = 20%
	10.0	1	0)	l labolone!	l	Lensidered for		L /4)
LUMBER TOP CHORD BOT CHORD WEBS SLIDER	2x4 SP No.2 2x6 SP No.2 2x4 SP No.3 Left 2x4 SP No.3 1-6-0	1-6-0, Right 2x4 SP N	3) 4) No.3	Unbalanced this design. Wind: ASCE Vasd=103mp Cat. II; Exp B zone; cantile	roof live loads have been of 7-16; Vult=130mph (3-sec bh; TCDL=6.0psf; BCDL=6 3; Enclosed; MWFRS (envi- ver left and right exposed	considered for cond gust) c.0psf; h=25ft; elope) exterior ; end vertical left	Uniform Loads (I Vert: 1-4=-60, Concentrated Lo Vert: 20=-1192 23=-1192 (B),	^{b/ft}) 4-7=-60, 10-14=-20 ads (lb) 2 (B), 21=-1192 (B), 22=-1192 (B), 24=-1192 (B), 25=-1192 (B)
BRACING TOP CHORD	Structural wood she	eathing directly applie	ed or 5)	and right exp DOL=1.60 TCLL: ASCE	osed; Lumber DOL=1.60 p 7-16; Pr=20.0 psf (roof LL	late grip .: Lum DOL=1.15		
BOT CHORD	Rigid ceiling directly bracing.	applied or 10-0-0 oc	;	Plate DOL=1 DOL=1.15); I	.15); Pf=20.0 psf (Lum DC s=1.0; Rough Cat B; Fully	L=1.15 Plate Exp.; Ce=0.9;		
REACTIONS	(size) 1=0-5-8, Max Horiz 1=-106 (L Max Uplift 1=-433 (L Max Grav 1=4340 (l	7=0-5-8 _C 8) _C 12), 7=-403 (LC 13 L C 18)_7=4055 (LC 1	6) 3) 7) 19)	Unbalanced design. This truss ha	snow loads have been cor	isidered for this 0 psf bottom		
FORCES	(lb) - Maximum Con Tension 1-3=-5231/538, 3-4=	=-5126/581,	8)	* This truss h on the botton 3-06-00 tall b	ad nonconcurrent with any has been designed for a liv n chord in all areas where by 2-00-00 wide will fit betw	e load of 20.0psf a rectangle veen the bottom		
BOT CHORD	4-5=-5072/576, 5-7= 1-9=-461/4272, 8-9= 7-8=-393/4220	=-5182/533 =-278/3025,	9)	chord and an LGT2 Simpso connect truss	iy other members. on Strong-Tie connectors i s to bearing walls due to U	ecommended to PLIFT at jt(s) 1		AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
WEBS	4-8=-341/2886, 5-8= 4-9=-352/2992, 3-9=	=-102/190, =-126/180		and 7. This c consider late	connection is for uplift only ral forces.	and does not		TH CARO
NOTES	s to be connected to co	ther with 10d	10) This truss is International	designed in accordance w Residential Code sections	th the 2018 R502.11.1 and	and and	ON FESSION 1
 2-piy truss (0.131"x3" Top chord oc. Bottom ch staggered Web conn All loads a except if r CASE(S) provided t 	") nails as follows: Is connected as follows: Is connected as follow nords connected as follow at 0-9-0 oc. In the total of the total of the total are considered equally noted as follows: 2x4 are considered equally noted as fornt (F) or ba section. Ply to ply conn o distribute only loads	s: 2x4 - 1 row at 0-9-(lows: 2x6 - 2 rows - 1 row at 0-9-0 oc. - applied to all plies, lock (B) face in the LO, nections have been noted as (F) or (B),	0 11 12 AD 13 LC	11-10dx1 1/2 spaced at 2-0 end to 11-6-4 chord.) Fill all nail ho) LGT2 Hurrica the truss.	And referenced standard AN a Strong-Tie HTU26 (20-10 2 Truss, Single Ply Girder) 0-0 oc max. starting at 1-6 4 to connect truss(es) to bac alles where hanger is in cor ane ties must have two stu Standard	ISI/TPI 1. Jd Girder, or equivalent -4 from the left ack face of bottom ttact with lumber. ds in line below	Contraction of the second second	SEAL 036322

- 11-10dx1 1/2 Truss, Single Ply Girder) or equivalent Bottom chords connected as follows: 2x6 - 2 rows spaced at 2-0-0 oc max. starting at 1-6-4 from the left end to 11-6-4 to connect truss(es) to back face of bottom chord.
- Web connected as follows: 2x4 1 row at 0-9-0 oc. All loads are considered equally applied to all plies, 2) except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.

- 12) Fill all nail holes where hanger is in contact with lumber.
- 13) LGT2 Hurricane ties must have two studs in line below
- the truss
- LOAD CASE(S) Standard
- Dead + Snow (balanced): Lumber Increase=1.15, Plate 1) Increase=1.15

mm June 14,2023

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818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	EGE	Common Supported Gable	1	1	Job Reference (optional)	158937621

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:38 ID:1SfXIVJYql6Slw6AgLBDoDz6RT1-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

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Scale = 1:41.5

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC20	18/TPI2014	CSI TC BC WB Matrix-MR	0.20 0.11 0.15	DEFL Vert(LL) Vert(CT) Horz(CT)	in n/a n/a 0.00	(loc) - - 12	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 88 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD BOT CHORD WEBS OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP N 2x4 SP N 2x4 SP N 2x4 SP N Structura 6-0-0 oc Rigid ceil bracing. (size) Max Horiz Max Uplift Max Grav	o.2 o.2 o.3 o.3 I wood shea burlins, exc ing directly 12=13-5-C 15=13-5-C 20=174 (L 12=-227 (14=-60 (L 17=-58 (L) 19=-225 (12=242 (L 14=226 (L 14=226 (L 14=226 (L 16=178 (L 18=226 (L 20=262 (L)	athing directly applie cept end verticals. applied or 6-0-0 oc), 13=13-5-0, 14=13), 19=13-5-0, 20=13 , 19=13-5-0, 20=13 , 19=13-5-0, 20=13 , 19=13-5-0, 20=13 , 19=-210 (LC C 13), 13=-210 (LC C 12), 13=291 (LC C 22), 15=260 (LC C 22), 15=260 (LC C 21), 19=307 (LC C 21), 19=307 (LC C 13)	-5-0, -5-0, -5-0, -5-0, 2 10), 5), 4), 2 10) 13), 22), 5 21), 12), 6	 Unbalanced roof live loads have been considered for this design. Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Corner(3E) -0-10-8 to 2-1-8, Exterior(2N) 2-1-8 to 3-8-8, Corner(3R) 3-8-8 to 9-8-8, Exterior(2N) 9-8-8 to 11-3-8, Corner(3E) 11-3-8 to 14-3-8 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1. TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for this design. This truss has been designed for greater of min roof live 					al connection (b) able of withstand lift at joint 12, 58 225 lb uplift at ji t at joint 14 and ned in accordan dential Code sec erenced standar ndard	¹¹ others) of truss to ng 245 lb uplift at lb uplift at joint 17, 60 jint 19, 58 lb uplift at 210 lb uplift at joint ce with the 2018 tions R502.11.1 and d ANSI/TPI 1.)			
FORCES	(lb) - Max Tension	imum Com	pression/Maximum	-	overhangs no	on-concurrent with	other liv	/e loads.					"TH CA	ROUT	
TOP CHORD	2-20=-16 3-4=-67/1 6-7=-95/2 9-10=-11	3/162, 1-2= 19, 4-5=-5 272, 7-8=-5 4/119, 10-1	0/34, 2-3=-124/129, 8/201, 5-6=-95/272, 8/201, 8-9=-62/119, 1=0/34, 10-12=-155	, 8 9 5/121 1) All plates are) Gable require) Truss to be fi braced again	es continuous botto ully sheathed from st lateral movemen	one fac	d bearing. e or securely iagonal web).			4	i	OFESS	Maria	7
BOT CHORD	19-20=-9 16-17=-9 13-14=-9	2/87, 18-19 2/87, 15-16 2/87, 12-13	=-92/87, 17-18=-92/ =-92/87, 14-15=-92/ =-92/87	/87, 1 /87, 1	10) Gabe study spaced at 2000 cc. 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. 12) This true has been designed for a live load s. 13) This true has been designed for a live load s. 13) This true has been designed for a live load s.								L 22		
WEBS	6-16=-22 4-18=-18 7-15=-22 9-13=-13	2/12, 5-17= 5/123, 3-19 0/103, 8-14 4/112	220/103, =-141/119, =-185/123,	·	on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.							EERA			
NOTES													June	allBr e 14,2023	

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	EGR	Common Girder	1	2	Job Reference (optional)	158937622

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:38 ID:QCiWCkeHS2khFeTgPxQLfPz6R9E-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

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Scale = 1:48.4	4-0-13	·	4-
Plate Offsets (X, Y): [7:0-5-0,0-4-12], [8:0-5-0,0-4-12]			

	(), <u></u>	J, E = = = (= _]												
Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roo	f) 20.0	Plate Grip DOL	1.15		TC	0.78	Vert(LL)	-0.04	6-7	>999	240	MT20	244/190	
Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.96	Vert(CT)	-0.08	6-7	>999	180	MT20HS	187/143	
TCDL	10.0	Rep Stress Incr	NO		WB	0.56	Horz(CT)	0.02	6	n/a	n/a			
BCLL	0.0*	Code	IRC201	8/TPI2014	Matrix-MSH									
BCDL	10.0											Weight: 202 lb	FT = 20%	
LUMBER			4)	Wind: ASCE	7-16; Vult=130m	ph (3-seo	cond gust)			Vert: 1-3	3=-60,	3-5=-60, 6-9=-20		
TOP CHO	RD 2x4 SP No.2			Vasd=103m	oh; TCDL=6.0psf;	BCDL=6	0.0psf; h=25ft	;	C	oncentra	ted Lo	ads (lb)		
BOT CHO	RD 2x6 SP No.2			Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior Vert: 12=-1290 (B), 13=-1) (B), 13=-1290 (I	3), 14=-1290) (B),	
WEBS	2x4 SP No.3			zone; cantilever left and right exposed ; end vertical left 15=-1290 (B), 16=-1290 (B), 17=-1290 (B)										
BRACING				and right exposed; Lumber DOL=1.60 plate grip										
TOP CHO	RD Structural wood she	athing directly applie	ed or	DOL=1.60										
	6-0-0 oc purlins, ex	cept end verticals.	5)	TCLL: ASCE	: 7-16; Pr=20.0 ps	f (roof Ll	_: Lum DOL=	1.15						
вот сно	RD Rigid ceiling directly	applied or 10-0-0 or		Plate DOL=1	.15); Pf=20.0 psf	(Lum DC	DL=1.15 Plate	Э						
	bracing.			DOL=1.15);	ls=1.0; Rough Ca	t B; Fully	Exp.; Ce=0.	9;						
REACTIO	NS (size) 6=0-5-8.9	9=0-5-8		Cs=1.00; Ct=	=1.10									
	Max Horiz 9=155 (LC	C 36)	6)	Unbalanced	snow loads have	been coi	nsidered for t	his						
	Max Uplift 6=-444 (L	.C 13). 9=-403 (LC 1	2) -	design.			nuice indicate							
	Max Grav 6=4686 (L	_C 19), 9=4269 (LC	-/ /) 18) ()	All plates are	e IVI I 20 plates uni	ess othe	wise indicate	ea.						
FORCES	(lb) - Maximum Com	(lb) - Maximum Compression/Maximum			as been designed	with onv	other live ler	de						
1 011020	Tension	procoroni, maximum	0)	* This trues h	au nonconcurrent	d for a liv	load of 20	ius. Onef						
тор сно	RD 1-2=-417/85. 2-3=-4	107/471. 3-4=-4146/	(475. ⁹)	on the bottom chord in all areas where a rectangle										
	4-5=-461/90, 1-9=-3	27/76. 5-6=-353/79	,	3-06-00 tall b	2-00-00 wide w	ill fit hot	veen the hott	om						
вот сно	RD 8-9=-314/3105, 7-8=	-232/2591,		chord and ar	y other members			om						
	6-7=-290/3138		10) LGT2 Simps	on Strong-Tie cor	nectors	recommende	d to						
WEBS	3-7=-284/2364, 4-7=	-141/1076,		connect trus	s to bearing walls	due to U	PLIFT at it(s) 9						
	3-8=-274/2268, 2-8=	-140/1076,		and 6. This c	connection is for u	plift only	and does no	t					11.	
	2-9=-4255/376, 4-6=	-4249/375		consider late	eral forces.							IN CA	DUL	
NOTES			11) This truss is	designed in accor	rdance w	ith the 2018					THUA	ROIT	1
1) 2-ply t	russ to be connected toge	ther with 10d		International	Residential Code	sections	s R502.11.1 a	and			N	M JESO	a. In	1
(0.131	"x3") nails as follows:			R802.10.2 a	nd referenced sta	ndard Al	ISI/TPI 1.			/	22	OFF	PN	2-1
Top cl	nords connected as follows	s: 2x4 - 1 row at 0-9-	0 12	 Use Simpson 	n Strong-Tie HTU	26 (20-1	0d Girder,				V		120	
OC.				11-10dx1 1/2	2 Truss, Single Ply	/ Girder)	or equivalen	t		-	è – р	N N		
Bottor	n chords connected as foll	ows: 2x6 - 2 rows		spaced at 2-	0-0 oc max. starti	ng at 2-0	-12 from the	left		-		SEA		8 E
stagge	ered at 0-7-0 oc.			end to 12-0-12 to connect truss(es) to back face of										
Web c	onnected as follows: 2x4 -	1 row at 0-9-0 oc.		bottom chord	1. 							0363	22 :	-
All loa	ds are considered equally	applied to all plies,	13) Fill all hall ho	pies where hange		itact with lum	iber.		-	3			-
excep	t it noted as front (F) or ba	ck (B) face in the LC	DAD 14	the trues	ane ties must hav	e two sti	ius in line bel	OW			1		a	1
CASE	(5) section. Ply to ply conr	section. Ply to ply connections have been			the truss.						2.0	NGINI	EL	5
provid	eu lo distribute only loads	noted as (F) or (B),	LC	LOAD CASE(S) Standard					EX	N				
2) Uniess	ounerwise indicated.	hoon considered for	. 1)	1) Dead + Snow (paranced): Lumber increase=1.15, Plate										
J) UNDaliant this data	anceu root live loads have	been considered for	ſ	increase=1	.15 ada (lk/#)							1111.0	in in	
unis de	siyn.			Uniform Loads (lb/tt)										

June 14,2023



Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	F	Common	5	1	Job Reference (optional)	158937623

6-3-12

6-3-12

Carter Components (Sanford), Sanford, NC - 27332,

2-7-4

0-9-0

2-8-7

-0-10-8

0-10-8

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:39 ID:VNhUx16Vbr5kqTu5L_uT9rz6RTH-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

12-7-8

6-3-12



13-6-0

0-10-8

4

3x5 =

5

4x5 = 12 4 Г 3 15 14 13 16 2 Ю 6 17 18 19 20 2x4 u 3x5 =

					6-3-12					12-7-8	3		
		Γ		(6-3-12					6-3-12	2		
Scale = 1:31.7													
Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MSH	0.75 0.53 0.10	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.10 -0.11 0.01	(loc) 6-12 6-12 4	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 45 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD FORCES TOP CHORD BOT CHORD BOT CHORD WEBS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 3-9-3 oc purlins. Rigid ceiling directly bracing. (size) 2=0-3-0,4 Max Horiz 2=-38 (LC Max Uplift 2=-203 (Li Max Grav 2=651 (LC (lb) - Maximum Com Tension 1-2=0/17, 2-3=-913/' 4-5=0/17 2-6=-1038/782, 4-6= 3-6=-454/271	athing directly applie applied or 5-5-6 oc -15) C 10), 4=-203 (LC 1 2 21), 4=651 (LC 22 pression/Maximum 1196, 3-4=-913/119 -1038/782	5) ed or 7) 8) ⁽¹⁾ 9) 6, LC	This truss ha load of 12.0 j overhangs n This truss ha chord live loa * This truss h on the bottor 3-06-00 tall b chord and ar One H2.5A S recommende UPLIFT at jt(and does not This truss is International R802.10.2 ar	Is been designed psf or 1.00 times on-concurrent win is been designed ad nonconcurrent has been designed n chord in all area by 2-00-00 wide v by other members Simpson Strong-T ed to connect trus s) 2 and 4. This of t consider lateral designed in acco Residential Code nd referenced sta Standard	I for great flat roof I I for a 10.1 I for a 10.1 I for a 10.1 I with any as where vill fit betv s. Fie conne sto bear connectio forces. ordance we e sections andard AN	er of min roc bad of 20.0 p ve loads. D psf bottom other live lo: e load of 20 a rectangle veen the bot ctors ing walls dua n is for uplift ith the 2018 \$ R502.11.1 ISI/TPI 1.	of live osf on ads. .0psf tom e to conly and					
NOTES 1) Unbalance	ed roof live loads have	been considered fo	r										

this design.

2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-3-12, Exterior(2R) 3-3-12 to 9-3-12, Interior (1) 9-3-12 to 10-6-0, Exterior(2E) 10-6-0 to 13-6-0 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

Unbalanced snow loads have been considered for this design.





Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	FGE	Common Supported Gable	1	1	Job Reference (optional)	158937624

6-3-12

6-3-12

Carter Components (Sanford), Sanford, NC - 27332,

-0-10-8 0-10-8

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:39 ID:NtPZCayMfrSanTObUl9Q75z6RTU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f







Scale = 1:28.5

Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.15		TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.04	Vert(CT)	n/a	-	n/a	999		
TCDL		10.0	Rep Stress Incr	YES		WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
BCLL		0.0*	Code	IRC20	18/TPI2014	Matrix-MSH								
BCDL		10.0											Weight: 51 lb	FT = 20%
LUMBER					2) Wind: ASCE	7-16; Vult=130m	iph (3-sec	cond gust)		14) This	s truss is	s desig	ned in accordan	ce with the 2018
TOP CHORD	2x4 SP No	o.2			Vasd=103m	oh; TCDL=6.0psf	BCDL=6	0.0psf; h=25ft;		Inte	rnationa	al Resi	dential Code sec	ctions R502.11.1 and
BOT CHORD	2x4 SP No	o.2			Cat. II; Exp E	3; Enclosed; MWI	FRS (env	elope) exterior		R80	2.10.2	and ref	ferenced standa	rd ANSI/TPI 1.
OTHERS	2x4 SP No	o.3			zone and C-	C Corner(3E) -0-	10-8 to 2-	3-12, Exterior		LOAD C	CASE(S) Sta	ndard	
BRACING					(2N) 2-3-12	o 3-3-12, Corner	(3R) 3-3-	12 to 9-3-12,			-	-		
TOP CHORD	Structural	wood she	athing directly applie	d or	Exterior(2N)	9-3-12 to 10-3-12 cantilever left an	2, Corner	(3E) 10-3-12 to mosed : end)					
	6-0-0 oc p	ourlins.			vertical left a	nd right exposed	:C-C for n	nembers and						
BOICHORD	bracing.	ng directly	applied or 10-0-0 oc	;	forces & MW	FRS for reaction	s shown;	Lumber						
REACTIONS	(size)	2=12-7-8.	8=12-7-8, 10=12-7-8	8	DOL=1.60 p	ate grip DOL=1.6	50							
	()	11=12-7-8	3, 12=12-7-8, 13=12-	7-8,	 I russ designed 	ned for wind load	s in the p	lane of the true	SS					
		14=12-7-8	3, 15=12-7-8, 18=12-	-7-8	only. For Stu	ids exposed to w	ina (norm End Data	al to the face),						
	Max Horiz	2=-38 (LC	15), 15=-38 (LC 15))	or concult a	a industry Gable	Ellu Dela	ns as applicad	10, 1 1					
	Max Uplift	2=-41 (LC	10), 8=-47 (LC 11),			7-16. Pr=20.0 p	sf (roof I I	\cdot Lum DOI =1	15					
		10=-39 (L	C 15), 11=-37 (LC 1	1),	Plate DOI =1	15) Pf=20.0 ps)I =1 15 Plate	.10					
		13=-36 (L	C 10), 14=-41 (LC 14	4),	DOL=1.15):	ls=1.0: Rough Ca	at B: Fully	Exp.: Ce=0.9:						
		15=-41 (L	C 10), 18=-47 (LC 1	1)	Cs=1.00: Ct	=1.10	,	, ,						
	Max Grav	2=176 (LC	C 21), 8=176 (LC 22)	l, <u>t</u>	5) Unbalanced	snow loads have	been cor	nsidered for thi	s					
		10=250 (L	LC 22), 11=222 (LC 2	22),	design.									
		12=139 (L	LC 1), 13=222 (LC 21	1), (This truss has	is been designed	for great	er of min roof I	ive					
		14=250 (L	C 21), 15=176 (LC 2	21),	load of 12.0	psf or 1.00 times	flat roof lo	bad of 20.0 ps	on					
500050		10=170 (L	-0 22)		overhangs n	on-concurrent wit	th other liv	ve loads.						1111
FURCES	(ID) - Maxi	Imum Com	pression/iviaximum	7	All plates are	e 2x4 MT20 unles	s otherwi	se indicated.					11111	A.D. 111
	1 2-0/17	2 2- 52/2	5 2 1- 51/56	8	 Gable requir 	es continuous bo	ttom chor	d bearing.				1	I'TH U	ARO (1)
TOF CHORD	1-2=0/17,	2-3=-32/3	1/108 6-751/56	ę	 Gable studs 	spaced at 2-0-0 o	DC.					1	A	De Main
	7-852/3	5 8-9-0/1	4/100, 0-7 =-3 1/30, 7		10) This truss ha	is been designed	for a 10.0	0 psf bottom				21		Print
BOT CHORD	2-14=-20/	44 13-14=	, _0/44 12-13_0/44		chord live loa	ad nonconcurrent	with any	other live load	s.		1		19 10	19.11
Bol onone	11-12=0/4	4 10-11=	0/44 8-10=-20/44		11) ^ This truss r	has been designe	d for a liv	e load of 20.0	DST		-		.4	19.12
WEBS	5-12=-97/4	46. 4-13=-	187/141. 3-14=-192/	120.	on the bottor	n chord in all are	as where	a rectangle			-		SF/	1 : =
	6-11=-187	7/141. 7-10)=-192/120	,	3-06-00 tall t	by 2-00-00 wide v		veen the botto	n		=		OLA	··· : =
NOTES		,			12) Provido moo	hapical connection	o. on (by oth	ore) of truce to			=		0363	322 : =
1) Unbalance	ed roof live la	oads have	been considered for		hearing plate	canable of withe	tanding /	1 lb unlift at io	int		-	- 3		
this desig	n.				2 47 lb unlift	at joint 8 36 lb i	inlift at ini	nt 13 41 lb un	lift			-	·	- A 1 - E
abbig					at joint 14. 3	7 lb uplift at joint	11. 39 lb	uplift at joint 10).			2.0	S. SNOW	FER. AN
					41 lb uplift at	ioint 2 and 47 lb	uplift at i	pint 8.	,			1	8	5. 64 5
					13) Beveled plat	e or shim require	d to provi	de full bearing				1	IL A C	31LBL IN

surface with truss chord at joint(s) 2, 15.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1** Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



G١ 1000 minut

June 14,2023

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	G	Monopitch	2	1	Job Reference (optional)	158937625

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Page: 1





Scale = 1:38.2

Loading TOLL (rod) (pd) 200 Show (P) Spacing 200 Plate Grip DOL 1.15 2-0-0 Plate Grip DOL 1.15 CSI TC 0.25 DC Vert(L1) 0.002 8.8 9999 240 MT20 244/190 TOLL Som (P) 20.00 TOL BCL 0.00 Rep Stress Incr YES REP Stress Incr YES Stres						· · · · · ·								
TCLL (roof) 20.0 Plake Grp DOL 1.15 TC 0.25 Vert(C1) 0.02 8 > 999 240 MT20 244/190 TCDL 0.07 Rep Stress Incr YES 0.01 Rep Stress Incr YES 0.01 7 n/a	Loading	(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
Snow (P) 20.0 Lumber DOL 1.15 BC 0.17 I (vrr(CT) 0.03 8 > > > > > > > > > > > > > > 999 180 BCLL 0.0* Code IRC2018/TPI2014 BCL 0.0* Weight: 37 lb FT = 20% LUMBER T0.0 D.0* Code IRC2018/TPI2014 BCL 0.0* Veight: 37 lb FT = 20% LUMBER T0.0 Code IRC2018/TPI2014 BCL 0.0* Veight: 37 lb FT = 20% LUMBER T0.0 Code Veight: 37 lb FT = 20% Veight: 37 lb FT = 20% Structural wood sheathing directly applied or 10-00 oc FT his truss has been designed for a 10.0 pet bottom chord in all areas where a recommetions. FT his truss has been designed for a 10.0 pet bottom chord in all areas where a recommetions. FT his truss has been designed for a 10.0 pet bottom chord in all areas where a recommetions. FT his truss has been designed for a 10.0 pet bottom chord in all areas where a recommetions. FT his truss has been designed for a 10.0 pet bottom chord in all areas where a recommetions. FT his truss has been designed for a 10.0 pet bottom chord in all areas where a recommetions. FT his truss has been designed for a 10.0 pet bottom chord in all areas where a recommetions. FT his truss has been designed for a 10.0 pet baring truss to bearing walls due to 10.0 pet 10.0 pet 10.	TCLL (roof)	20.0	Plate Grip DOL	1.15		TC	0.25	Vert(LL)	-0.02	8	>999	240	MT20	244/190
TCDL 10.0 Reg Stress Incr YES WB 0.26 Horz(CT) 0.01 7 n/a n/a BCDL 10.0 Code IRC2018/TPI2014 Mark-MP WB 0.26 Horz(CT) 0.01 7 n/a n/a LUMBER 10.0 Code IRC2018/TPI2014 Mark-MP Weight: 37 Ib FT = 20% LUMBER TOP CHORD 2x4 SP No.3 This truss has been designed for a 10.0 psf bottom chord ive leads anonconcurrent with any other live leads. - This truss has been designed for a 10.0 psf bottom FOP CHORD Structural wood sheathing directly applied or 100-0 cot bracing. FT is truss has been designed for a live loads. - - This truss tas been designed for a live loads. - - - - - This truss has been designed for a live loads. -	Snow (Pf)	20.0	Lumber DOL	1.15		BC	0.17	Vert(CT)	-0.03	8-9	>999	180		
BCLL 0.0° Code IRC2018/TPI2014 Matrix-MP Weight: 37 Ib FT = 20% LUMBER TOP CHORD 2x4 SP No.2 5 This truss has been designed for a 10.0 psf bottom chord live load anoncoursent with any other live loads. ************************************	TCDL	10.0	Rep Stress Incr	YES		WB	0.26	Horz(CT)	0.01	7	n/a	n/a		
BCDL 10.0 Weight: 37 lb FT = 20% LUMBER TOP CHORD 2x4 SP No.2 S This truss has been designed for a 10.0 p5 bottom chord live load nonconcurrent with any other live loads. S This truss has been designed for a 10.0 p5 bottom chord live load nonconcurrent with any other live loads. BTACINON TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc bracing. This truss has been designed for a live load of 20.0 p5f on the bottom chord in all areas where a rectangle 3:06-00 all by 2:00-00 wide will fit between the bottom chord live load nonconcurrent with any other live loads. FRACTONS GIC CHORD Structural wood sheathing directly applied or 10-0.0 oc bracing. This truss has been designed for a live load of 20.0 p5f on the bottom chord in all areas where a rectangle 3:06-00 tall by 2:00-00 wide will fit between the bottom chord and any other members. FREACTONS GIS (Size) 7 - Mechanical, 9=-0.5-8 Max Horiz 9=-130 (LC 14), 9:-00-00 tall by 2:00-00 wide will fit applied to fold on 4 any other members. 9 Provide mechanical connection. (by others) of truss to bearing plate capabiel of withstanding g9 lb upilit at joint 7.0 met 12:6.5 Simpson Strong-Tie connecturus to bearing walls due to recommended connector upili for upili only and does need standed in accortaince with the 2018 Intermational Residential Code sections R502.11.1 and R802.10.2 and referenced standerd ANSUTPI 1. IV Mict ASCE 7-16; Vull=130mph (3-second gust) 11 This truss has been designed for chis for Live back in the DOL-1.150 plate grip DOL-1.150; PF-200 pdf (cur IL): uno DL-1.151 Pic200 pdf (cur DDL-1.150 plate grip DOL-1.150; Pi	BCLL	0.0*	Code	IRC2018	3/TPI2014	Matrix-MP								
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 2x4 SP No.2 2x4 SP No.2 STUCLUTal wood sheathing directly applied or toP CHORD Structural wood sheathing directly applied or toP CHORD Co-O or puttine, except end verticals. BOT CHORD Rigid celling directly applied or 10-0-0 or bracing. REACTIONS (size) 7 - Mechanical, 9=-0-5-8 Max Ivoit 7 7=-375 (LC 21), 9=-30 (LC 14) Max Upilit 7 -=-69 (LC 14), 9=-30 (LC 12) Max Upilit 7 -=-69 (LC 14), 9=-30 (LC 14) Max Upilit 7 -=-69 (LC 14) Max Upilit Approxed60 (LC 14) (BCDL	10.0											Weight: 37 lb	FT = 20%
TOP CHORD 2x4 SP No.2 chord live load nonconcurrent with nay other live loads. BOT CHORD 2x4 SP No.2 chord live load nonconcurrent with nay other live loads. BRACING Structural wood sheathing directly applied of co-0 co purifies, except end verticals. chord in a lareas where a rectangle SOT CHORD Structural wood sheathing directly applied or 100-00 co bracing. Refer total by 2-00.00 wide will fit between the bottom chord and any other members. REACTIONS Size) 7 - Mechanical, 9=-0-5-8 Max Holit 7 - Mechanical, 9=-0-5-8 Max Holit 9 (10 c14), 9=-30 (LC 14), 9=-30 (LC 14), Max Grav Max Grav 7-375 (LC 21), 9=-384 (LC 21) FORCES (b) - Maximum Compression/Maximum TOP CHORD 2-9=-349/213, 1-2-0/27, 2-3=-731/234, 42-8-65/0, 45-8-1/20, 4711/131 BOT CHORD 2-9=-349/213, 1-2-0/27, 2-3=-731/234, 42-8-65/0, 45-8-1/20, 4711/131 NOTES 11 This truss is designed in a coordance with the 2018 International Residential Code sections R502-11.1 and R826 T-16: Valler 3-6, fitcher 3-1, fitcher R 11 This truss is designed in a coordance with the 2018 International Residential Code section R502.11.1 and R820.12.1.5; PH=20.0 psf (cord LL: Lum DOL=1.15; Phate DOL=1.15; Pher20.0 psf (cord LL: Lum DOL=1.15 Phate DOL=1.15; Phate DOL=1.15; Phate DOL=1.15; Pher20.0 psf (cord LL: Lum DOL=1.15; Phate DOL=1.15; Pher2	LUMBER			5)	This truss ha	s been designed f	or a 10.) psf bottom						
BOT CHORD 2x4 SP No.2 SRACING BRACING BRACING TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals, BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. REACTIONS (size) 7= Mechanical, 9=0-5-8 (size) 7= Michanical, 9=0	TOP CHORD	2x4 SP No.2			chord live loa	ad nonconcurrent v	with any	other live loa	ids.					
 WEBS 2x4 SP No.3 BRACING Structural wood sheathing directly applied or f0-00 cutils, sexcept end verticals. BOT CHORD Structural wood sheathing directly applied or f0-00 cutils 2-0-00 und will if between the bottom chord and any other members. BOT CHORD REACTIONS (size) 7 = Mechanical, 9=-05-8 Max Horiz 9=130 (LC 11) Max Grav 7-375 (LC 21), 9=-384 (LC 21) FORCES (b) - Maximum Compression/Maximum Tension TOP CHORD 2-9-3-349213, 1-2=-0/27, 2-3=-731/234, 4-46/80, 4-5=-120, 4-7=-111/31 BOT CHORD 8-9143/168, 7-8=-233672, 6-7=-0/0 Wind: ASCE 7-16; Ville 130mph (3-second gust) WeES 2-8-128/618, 3-8-52/212, 3-7-e18/229 Notres Notres 1) Wind: ASCE 7-16; Ville 130mph (3-second gust) Vasce-103specid (2E) -0-10 do 12-1.5, Interior (1) 2-1-8 to 3-60, Extenor(2E) 3-6-0 to 6-0-2 cne; carativer et and right exposed; end vertical left and right exposed; end vertical left and right exposed; C-16 ruembers and forces & MWFRS (revelope) exterior cons show; Lumber DDL=1.160 pilk ergin DOL=1.16); I=-10, Rough Cat B; Fully Exp.; Cee-0.9; Cs=1-10; Ccl=1.10 This trues has been designed for trains to faste and role uses and roces & how been considered for this design. This trues has been designed for trains tor form the faste form the considered for this design. This trues has been designed for trains tor form the faste form the faste form the considered for this design. This trues has been designed for trains and force as multicated for this designed for trains and form the faste form the form this design. This trues has been designed for trains and form the faste form the form the fa	BOT CHORD	2x4 SP No.2		6)	* This truss h	as been designed	l for a liv	e load of 20.0	Opsf					
 BRACING Brockerial wood sheathing directly applied or 10-0-0c bracing. BOT CHORD Rigid ceiling directly applied or 10-0-0c bracing. BOT CHORD Rigid ceiling directly applied or 10-0-0c bracing. BOT CHORD (Size) 7- Mechanical, 9=0-5-8 Max Horiz 9=130 (LC 11) Max Uplit 7-e69 (LC 14), 9=-30 (LC 11) Max Uplit 7-e69 (LC 14), 9=-30 (LC 11) Max Grav 7=375 (LC 21), 9=-384 (LC 21) FORCES (b) - Maximum Compression/Maximum Tension TOP CHORD 2-98-349/213, 1-2=0/27, 2-3=-731/234, 3-4=-66/50, 4-5=-120, 4-7=-111/31 Horiz 10, 12-92-349/213, 1-2=0/27, 2-3=-731/234, 12-92-27	WEBS	2x4 SP No.3			on the bottor	n chord in all area	s where	a rectangle						
 TOP CHORD Structural wood shearthing directly applied or 10-0-0 c bracing. BOT CHORD REACTIONS (size) 7 - Mechanical, 9=0-5-8 Max Horiz 9=130 (LC 11) Max Upit 7 - 69 (LC 14), 9=-30 (LC 14), 9=-30 (LC 14) Max Grav 7 -375 (LC 21), 9=384 (LC 21) FORCES (b) - Maximum Compression/Maximum ToP-resion/Maximum ToP-resion/Maximum 2-38-126/018, 3-8-52/212, 3-7-e10123 TOP CHORD 2-9-349/213, 1-2-0/27, 2-3731/234, 3-4-e6/67, 0-45120, 4-7-4111/31 BOT CHORD 8-9143/168, 7-8-233/672, 6-7-0/0 UPIET at (j6) 9 - This connection is to public only and does not consider lateral forces. 1 This use is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANS//TPI 1. LOAD CASE(S) Standard LOAD CASE(S) Standard Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-60, Exterior(2E) -0-0-9 to 2-1-8, Interior (1) 2-1-8 to 3-60, Exterior(2E) -0-0-9 to 2-1-8, Interior (1) 2-1-8 to 3-60, Exterior(2E) -0-0-9 to 2-1-8, Interior (1) 2-1-8 to 3-1-8, Interior (1) 2-1-8 to 3-1, Exp B; Enclosed; red writical left and right exposed; c: of or members and forces & MWFRS for reactions shown; Lumber DOL=1.16 Plate DOL=-1.15) Plate DOL=-1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (troub L=1.15 Plate DOL=-1.16) 2) TCLL: ASCE 7-16; Pr=20.0 psf (troub L=1.15 Plate DOL=-1.16) 2) TCLL: ASCE 7-16; Pr=20.0 psf (troub L=1.15 Plate DOL=-1.16) 3) Unbalanced snow loads have been considered for this designed for meater of ming not line 4) This truss has been designed for creater of ming not line 	BRACING				3-06-00 tall b	y 2-00-00 wide wi	II fit betv	veen the bott	om					
 B-0-0 oc pulmis, except end verticals. B-Bearing at joint(3) 9 considers parallel to grain value using ANS/TP1 1 angle to grain value using ANS/TP1 1 angle to grain value using ANS/TP1 1 angle to grain formula. Building designer should vertify capacity of bearing surface. Provide mechanical connection (by others) of truss to bearing wills due to trust to bearing wills due to connect trusts to bearing wills due to trust to bearing wills due to true trust to bearing wills due to the trust to the trust to bearing wills due to the trust to the trust to bearing wills due to the trust to the trust to bearing wills due to the trust to bearing wills due to the trust to bearing wills due to the trust to trust to the trust to the trust to the trust to tr	TOP CHORD	Structural wood she	athing directly applie	ed or 7)	chord and an	y other members.		ections						
 bracing. bracing. Brack Truns (size) Te Mechanical, 9=0-5-8 Max Horiz 9=130 (LC 11) Max Grav 7=375 (LC 21), 9=384 (LC 21) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 69 lb uplift at joint 7. FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 2-9=-349/213, 1-2=0/27, 2-3=-731/234, 3-4=-66/50, 4-5=-120, 4-7=-111/31 BOT CHORD 8-9=-143/168, 7-8=-233/572, 6-7=0/0 WEBS 2-8=-126/618, 3-8=-52/212, 3-7=-618/297 NOTES 1) Wind: ASCE 7-16; Vull=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25/1; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior 2nc and C-C Exterior(2E) -0-10.8 to 21-18, Internation (1) 2-1-18 to 3-6-0. Exterior(2E) -0-10.8 to 21-18, Internation (1) 2-1-18 to 3-6-0. Exterior(2E) -0-10.8 to 21-18, Internation (1) 2-1-18 to 3-6-0. Exterior(2E) -0-10.8 to 21-18, Internation (1) 2-1-18 to 3-6-0. Exterior(2E) -0-10.8 to 21-18, Internation (1) 2-1-18 to 3-6-0. Exterior(2E) -0-10.8 to 21-18, Internation (1) 2-1-18 to 3-6-0. Exterior(2E) -0-10.8 to 21-18, Internation (1) 2-1-18 to 3-6-0. Exterior(2E) -0-10.8 to 21-18, Internation (1) 2-1-18 to 3-6-0. Exterior(2E) -0-10.8 to 21-18, Internation (1) 2-1-18 to 3-6-0. Exterior(2E) -0-10.8 to 21-18, Internation (1) 2-1-18 to 3-6-0. Exterior(2E) -0-10.8 to 21-18, Internation (1) 2-1-18 to 3-6-0. Exterior(2E) -0-10.8 to 21-18, Internation (1) 2-1-18 to 3-6-0.0 psf (cm DL=-1.15 plate DL=-1.6) TOLL: ASCE 7-16; Pr=20.0 psf (cord LL: Lum DL=-1.15 Plate DL=-1.15); Pl=20.0 psf (cord LL: Lum DL=-1.15 Plate DL=-1.15); Pl=20.0 psf (cord LL: Lum DL=-1.15 Plate DL=-1.15); Pl=20.0 psf (cord DL=-1.15 Plate DL=-1.15); Pl	BOT CHORD	Rigid ceiling directly	cept end verticals. applied or 10-0-0 or	c 8)	Bearing at jo	int(s) 9 considers	parallel	o grain value	•					
 REACTIONS (size) 7= Mechanical, 9=0-5-8 Max Horiz 9=130 (LC 11), Max Upilit 7=-69 (LC 14), 9=-30 (LC 14), Max Grav 7=375 (LC 21), 9=384 (LC 21) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 2-9=-349/213, 1-2=0/27, 2-3=-731/234, -34=-86/50, 4-5=-120, 4-7s111/31 BOT CHORD 8-9=-143/168, 7-8=-233/572, 6-7=0/0 WEBS 2-8=-126/618, 3-8=-52/212, 3-7=-618/297 NOTES 1) Wind: ASCE 7-16; Vull=130mph (3-second gust) vasd=-103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) -0-0-8 to 6-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; -C: for members and forces & MWFRS for reactions shown; Lumber DDL=1.60 paff; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; tum DDL=1.15 Plate DDL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (cord LL: Lum DDL=1.15 Plate DDL=1.160 2) TCLL: ASCE 7-16; Pr=20.0 psf (cord LL: Lum DDL=1.15 Plate DDL=1.15; N=10; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 3) Unbalanced show loads have been considered for this design. 4) This truss is bas been designed for orgater of min tory filty 		bracing.			using ANSI/I	PI 1 angle to grai	n formul	a. Building						
 Max Horiz 9–130 (LC 11) Max Upitf 7=-69 (LC 14), 9=-30 (LC 14) Max Grav 7=375 (LC 21), 9=-384 (LC 21) FORCES (b) - Maximum Compression/Maximum Tension TOP CHORD 2-9=-349/213, 1-2=0/27, 2-3=-731/234, -3-4=-66/50, 4-5=-12/0, 4-7=-111/31 OT CHORD 8-9=-143/168, 7-8=-235/72, 6-7-0/0 WEBS 2-8=-126/618, 3-8=-52/212, 3-7=-618/297 NOTES I) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=-25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10 ts 10 2-18, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) -0-10 ts 10 2-18, Interior (1) 2-1-8 to 3-6-0. C for members and forces & MWFRS for reactions shown; Lumber DOL=-1.60 plate grip DOL=1.60 TOLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=-1.15 Plate DOL=-1.15); Is=-1.0; Rough Cat B; Fully Exp; : Ce=0.9; Cs=-1.00; Ct=1-110; I) Unbalanced snow loads have been considered for this design. M This truss has been designed for rereater of min frond live 	REACTIONS	(size) 7= Mecha	anical, 9=0-5-8	0)	designer sno	buid verify capacity	of bear	ng surrace.	-					
Max Uplift 7=-69 (LC 14), 9=30 (LC 14) Max Grav 7=375 (LC 21), 9=384 (LC 21) FORCES (b) - Maximum Compression/Maximum Tension TOP CHORD 2-9=349/213, 1-2=0/27, 2-3=-731/234, -3-4=-66/50, 4-5=-12/0, 4-7=-111/31 BOT CHORD 8-9=-143/168, 7-8=-233/572, 6-7=-0/0 WEBS 2-8=-126/618, 3-8=-52/212, 3-7=-618/297 NOTES 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd= 103mph; TCDL=6.0ps; bc2DL=6.0ps; th=25ft; Cat. II; zp B; Enclosed: MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) -0-10-8 to 2-1-15, Plate DOL=1.15); Fl=20.0 psf (tum DOL=-1.15 Plate DOL=-1.15); Fl=20.0 psf (roof LL: Lum DOL=-1.15 Plate DOL=-1.10; Plate DOL=-1.10; 3) Unbalanced snow loads have been considered for this design. This trues has been designed for greater of min roof live		Max Horiz 9=130 (LO	C 11)	9)	bearing plate	canable of withet	andina ƙ	albunlift at i	oint					
 Max Grav 7=375 (LC 21), 9=384 (LC 21) FORCES (Ib) - Maximum Compression/Maximum Tension TOP CHORD 2-9=-349/213, 1-2=0//27, 2-3=-731/234, 3-4=-66(5, 4-5=-120, 4-7=-111/31 BOT CHORD 8-9=-143/168, 7-8=-233/572, 6-7=0/0 WEBS 2-8=-126/618, 3-8=-52/212, 3-7=-618/297 NOTES 10 Wint: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; BCDL=6.0psf;		Max Uplift 7=-69 (LC	C 14), 9=-30 (LC 14)		7		anding c	o ib upint at j	onn					
 FORCES (Ib) - Maximum Compression/Maximum Tension ToP CHORD 2-9=-349/213, 1-2=0/27, 2-3=-731/234, 3-4=-66/50, 4-5=-120, 4-7=-111/31 BOT CHORD 8-9=-143/168, 7-8=-233/572, 6-7=0/0 WEBS 2-8=-126/618, 3-8=-52/212, 3-7=-618/297 NOTES 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0ps; BCDL=6.0ps; HcDL=6.0ps; BCDL=6.0ps; HcDL=6.0ps; BCDL=6.0ps; too 66-0 zone; cantilever left and right exposed; c-C for members and forces & MWFRS for reactions shown; Lumber DDL=1.60 pb12 ergip DDL=1.60 2) TCLL: ASCE 7-16; Vre=20.0 psf (roof LL: Lum DDL=1.15 Plate DDL=1.15; Pl=20.0 psf (roof LL: Lum DDL=1.15 Plate DDL=1.16; Pl=20.0 psf (roof LL: Lum DDL=1.15 Plate DDL=1.15; Pl=20.0 psf (roof LL: Lum DDL=1.15 Plate DDL=1.16; Pl=20.0 psf (roof LL: Lum DDL=1.15 Plate DDL=1.16; Pl=20.0 psf (roof LL: Lum DDL=1.15 Plate DDL=1.15; Pl=20.0 psf (roof LL: Lum DDL=1.15 Plate DDL=1.16; Pl=20.0 psf (roof LL: Lum DDL=1.15; Pl=20.0 psf (roof LL: Lum DDL=1.15 Plate DDL=1.16; Pl=20.0 psf (roof LL: Lum DDL=1.15; Pl=20.0 psf (roof LL: Lum DDL=1.15; Pl=20.0 psf (roof LL: Lum DDL=1.15 Plate DDL=1.16; Pl=20.0 psf (roof LL: Lum DDL=1.16; Pl=20.0 psf (roof LL: Plate Pl		Max Grav 7=375 (L0	C 21), 9=384 (LC 21) 10) One H2 5A S	Simpson Strong-Ti	e conne	ctors						
Tension TOP CHORD 2:9=-349/213, 1:2=0/27, 2:3=-731/234, 3:4=-6650, 4-5=-12/0, 4-7=-111/31 BOT CHORD 8:9=-143/168, 7-8=-233/572, 6-7=0/0 WEBS 2:8=-126/618, 3:8=-52/212, 3:7=-618/297 NOTES 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) -0-10-8 to 2-1-16, Interior (1) 2-1-160 2) TCLL: SCE 7-16; Pr=20.0 psf (toof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (toof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (toof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (toof LL: Lum DOL=1.15 Plate DOL=1.10 3) Unbalanced snow loads have been considered for this design. 4) Tbis trunss has been designed for grapter of min roof live	FORCES	(lb) - Maximum Corr	pression/Maximum		recommende	ed to connect truss	to bear	ing walls due	to					
 TOP CHORD 2-9=-349/213, 1-2=0/27, 2-3=-731/234, 3-4=-66/50, 4-5=-12/0, 4-7=-111/31 BOT CHORD 8-9=-143/168, 7-8=-233/572, 6-7=-00 WEBS 2-8=-126/618, 3-8=-52/212, 3-7=-618/297 NOTES NOTES NOTES NOTES 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior (1) 2-1-8 to 3-6-0. Exterior(2E) 3-6-0 to 6-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; core members and forces & MWFRS for reactions shown; Lumber DOL=1.160 plate grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (troof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (troof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (turn DOL=1.15 Plate DOL=1.10); Ct=1.10 3) Unbalanced snow loads have been considered for this design. 4) Tbis truss has been desimed for greater of min roof live 		Tension			UPLIFT at jt(s) 9. This connect	ion is fo	uplift only ar	nd					
 3-4=-66/50, 4-5=-12/0, 4-7=-111/31 BOT CHORD 8-9=-143/168, 7-8=-233/572, 6-7=0/0 WEBS 2-8=-126/018, 7-8=-233/572, 6-7=0/0 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) 3-6-0 to 6-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (cord LL: Lum DOL=1.15 Plate DOL=1.15); Pl=20.0 psf (cord LL: Lum DOL=1.15 Plate DOL=1.15); Pl=20.0 psf (cord LL: Lum DOL=1.15 Plate DOL=1.10; Nough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 3) Unbalanced snow loads have been considered for this design. 4) This truss has been designed for greater of min roof live 	TOP CHORD	2-9=-349/213, 1-2=0	0/27, 2-3=-731/234,		does not con	sider lateral forces	5.							
BOT CHORD 8-9=-143/168, 7-8=-233/572, 6-7=0/0 WEBS 2-8=-126/18, 3-8=-52/212, 3-7=-618/297 NOTES International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TP1 1. LOAD CASE(S) Standard 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 3-6-0 to 6-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (troof LL: Lum DOL=1.15 Plate DOL=1.15); Pl=20.0 psf (troof LL: Lum DOL=1.15 Plate DOL=1.15); Pl=20.0 psf (troof LL: Lum DOL=1.15 Plate DOL=1.16) 3) Unbalanced snow loads have been considered for this design. 4) This truss has been designed for greater of min roof live		3-4=-66/50, 4-5=-12	2/0, 4-7=-111/31	11) This truss is	designed in accore	dance w	ith the 2018						
 WEBS 2-8=-126/618, 3-8=-52/212, 3-7=-618/297 R802.10.2 and referenced standard ANSI/TPL1. LOAD CASE(S) Standard Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) -0-10-8 to 2-1-15 Plate DOL=1.60 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for this design. This truss has been designed for greater of min roof live 	BOT CHORD	8-9=-143/168, 7-8=-	233/572, 6-7=0/0	_	International	Residential Code	sections	R502.11.1 a	and					
NOTES LOAD CASE(S) Standard 1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) 3-6-0 to 6-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; c-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15; Pl=20.0 psf (Lum DOL=1.15 Plate DOL=1.15; Pl=20.0 psf (Lum DOL=1.15 Plate DOL=1.15; Pl=20.0 psf (Lum DOL=1.15 Plate DOL=1.10; SEAL 036322 3) Unbalanced snow loads have been considered for this design. 42 42	WEBS	2-8=-126/618, 3-8=-	·52/212, 3-7=-618/29	97	R802.10.2 a	nd referenced star	ndard AN	ISI/TPI 1.						
 Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) -3-6-0 to 6-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for this design. This truss has been designed for greater of min roof live 	NOTES			LC	AD CASE(S)	Standard								
 Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) 3-6-0 to 6-0 zone; cantilever left and right exposed ; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); IS=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 3) Unbalanced snow loads have been considered for this design. 4) This truss has been designed for greater of min roof live 	1) Wind: ASC	CE 7-16; Vult=130mph	(3-second gust)											
Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) 3-6-0 to 6-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); IS=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); IS=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 3) Unbalanced snow loads have been considered for this design. 4) This truss has been designed for greater of min roof live	Vasd=103	Bmph; TCDL=6.0psf; B	CDL=6.0psf; h=25ft;											1111.
 zone and C-C Exterior(2E) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-6-0, Exterior(2E) 3-6-0 to 6-6-0 zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 3) Unbalanced snow loads have been considered for this design. 4) This truss has been designed for greater of min roof live 	Cat. II; Ex	p B; Enclosed; MWFR	S (envelope) exterio	r									White CA	Dall
 2-1-8 to 3-6-U, Extendr(2E) 3-6-U to 6-6-0 Zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 3) Unbalanced snow loads have been considered for this design. 4) This truss has been designed for greater of min roof live. 	zone and	C-C Exterior(2E) -0-10)-8 to 2-1-8, Interior ((1)									aTHO	
 claimlever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 3) Unbalanced snow loads have been considered for this design. 4) This truss has been designed for greater of min roof live. 	2-1-8 to 3-	-b-U, EXTERIOR(2E) 3-b-U	U to 6-6-0 zone;	d							/	S	O FSS	12:21/2
for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 3) Unbalanced snow loads have been considered for this design. 4) This truss has been designed for greater of min roof live	right expo	sod: C C for mombors	and forces & MW/EP	u c							6	X		N: A
 SEAL TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for this design. This truss has been designed for greater of min roof live 	for reactio	ns shown: Lumber DC	and forces & MWER	.0									·0	N
 SEAL TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 Unbalanced snow loads have been considered for this design. This truss has been designed for greater of min roof live 	DOI = 1.60)	L= 1.00 plate grip								-			
Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 3) Uhbalanced snow loads have been considered for this design. 4) This truss has been designed for greater of min roof live	2) TCLL · AS	, CF 7-16 [,] Pr=20.0 psf ((roof LL · Lum DOL =1	15								:	SEA	L : =
 DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10 3) Unbalanced snow loads have been considered for this design. 4) This truss has been designed for greater of min roof live. 	Plate DOL	_=1.15): Pf=20.0 psf (L	um DOL=1.15 Plate										0363	22 =
Cs=1.00; Ct=1.10 3) Unbalanced snow loads have been considered for this design. 4) This truss has been designed for greater of min roof live.	DOL=1.15	5); Is=1.0; Rough Cat E	B; Fully Exp.; Ce=0.9);							-		. 0505	
 3) Unbalanced snow loads have been considered for this design. 4) This truss has been designed for greater of min roof live. 	Cs=1.00; 0	Ct=1.10											λ.	1 5
design. 4) This truss has been designed for greater of min roof live	3) Unbalance	ed snow loads have be	een considered for th	nis							5	1.	N.En.	Rich
4) This truss has been designed for greater of min roof live	design.											25	S, GIN	EFRAN
load of 12 0 perfort 100 times flat reef load of 20 0 perfor	4) This truss	has been designed fo	r greater of min roof	live								11	CA C	II BE IN

- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; 2) Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on overhangs non-concurrent with other live loads.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



GI 1000 minut

June 14,2023

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	G1	Half Hip	7	1	Job Reference (optional)	158937626

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Page: 1



3-7-12

3-2-4

R802.10.2 and referenced standard ANSI/TPI 1.

14) Graphical purlin representation does not depict the size

or the orientation of the purlin along the top and/or

provided sufficient to support concentrated load(s) 201 Ib down and 82 lb up at $\,$ 4-9-12 on top chord. The

Dead + Snow (balanced): Lumber Increase=1.15, Plate

Vert: 1-2=-60, 2-4=-60, 5-6=-115, 9-10=-20, 7-9=-20

design/selection of such connection device(s) is the

15) Hanger(s) or other connection device(s) shall be

4-9-12

1-2-0

DEFL

0.32 Horz(CT)

Vert(LL)

Vert(CT)

0.24

0.19

6-6-0

1-8-4

in

-0.02

-0.03

0.02

(loc)

9-10

9 >999

7

l/defl

>999

n/a n/a

L/d

240

180

PLATES

Weight: 38 lb

MT20

GRIP

244/190

FT = 20%

2x4 II

0-5-8

0-5-8

CSI

тс

BC

WB

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Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

1)

bottom chord.

responsibility of others.

Uniform Loads (lb/ft)

LOAD CASE(S) Standard

Increase=1.15

Concentrated Loads (lb) Vert: 4=-180

Scale = 1:39.6

Loading

TCLL (roof)

Snow (Pf)

TCDL

BCLL BCDL	0.0* 10.0	Code	IRC2018/TPI2014	Matrix-MP						
LUMBER TOP CHORD BOT CHORD WEBS BRACING TOP CHORD BOT CHORD	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood shea 5-11-13 oc purlins, e 2-0-0 oc purlins: 5-8, Rigid ceiling directly bracing	athing directly applied except end verticals, a 5-6. applied or 10-0-0 oc	 4) Unbalanced design. 5) This truss ha load of 12.0 overhangs n 1 or 6) Provide adec adec and 7) This truss ha chord live loa 8) * This truss h on the bottor 	 Unbalanced snow loads have been considered for design. This truss has been designed for greater of min rol load of 12.0 psf or 1.00 times flat roof load of 20.0 overhangs non-concurrent with other live loads. Provide adequate drainage to prevent water pond for a live load nonconcurrent with any other live load of 20.1 in truss has been designed for a 10.0 psf botto chord live load nonconcurrent with any other live load of 2 on the bottom chord in all areas where a rectangle 						
REACTIONS	(size) 7= Mechanical, 10=0-5-8 Max Horiz 10=104 (LC 11) 9) Max Uplift 7=-84 (LC 14), 10=-32 (LC 14) 10) Max Grav 7=462 (LC 36), 10=478 (LC 36) (lb) - Maximum Compression/Maximum 11)		3-06-00 tall t chord and ar 9) Refer to gird 10) Bearing at jo using ANSI/	 3-06-00 tall by 2-00-00 wide will fit between the bot chord and any other members. 9) Refer to girder(s) for truss to truss connections. 10) Bearing at joint(s) 10 considers parallel to grain val using ANS//TEL1 angle to grain formula. Building 						
FORCES			designer sho 11) Provide mec	build verify capacity of bear hanical connection (by oth	ing surface. ers) of truss to					
TOP CHORD	2-10=-443/254, 1-2= 3-4=-90/32, 5-8=-7/3	0/40, 2-3=-911/388, 9, 4-5=-188/51,	bearing plate 7.	e capable of withstanding 8	4 lb uplift at joint					
BOT CHORD WEBS	5-0=-11/16, 6-7=-11(9-10=-147/126, 8-9= 2-9=-266/774, 3-9=-4 5-9=-114/139, 5-7=-7	9/57 -291/618, 7-8=-302/6 43/218, 3-5=-698/402 740/366	12) One H2.5A S 44 recommende 5, UPLIFT at jt(does not con	12) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls du UPLIFT at jt(s) 10. This connection is for uplift only does not consider lateral forces.						
NOTES	ad roof live loads have	been considered for	13) This truss is International	designed in accordance w Residential Code sections	ith the 2018 R502.11.1 and					

2-0-0

1.15

1 15

YES

Unbalanced roof live loads have been considered for 1) this design.

(psf)

20.0

20.0

10.0

Spacing

Plate Grip DOL

Rep Stress Incr

Lumber DOL

- Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) -0-10-8 to 6-4-4 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 3) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10





Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	G1GE	Half Hip Supported Gable	1	1	Job Reference (optional)	158937627

3-9-8

3-9-8

-0-10-8

Carter Components (Sanford), Sanford, NC - 27332,

3-5-12

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:40 ID:einn9QFMsQjQrPrP4TucSQz6gkT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

6-6-0

1-6-8

4-11-8

1-2-0

Page: 1





Scale = 1:37.3

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MP	0.23 0.15 0.07	DEFL Vert(LL) Vert(CT) Horz(CT)	in -0.01 -0.02 0.00	(loc) 9-10 9-10 7	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 38 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORI BOT CHORI WEBS BRACING TOP CHORI	 2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 6-0-0 oc purlins, ex 2-0-0 oc purlins; 5-8 	athing directly applied cept end verticals, an	3) 4) d or d	Truss design only. For stu see Standard or consult qu TCLL: ASCE Plate DOL=1 DOL=1.15); I Cs=1.00; Ct=	heed for wind loads ds exposed to win l Industry Gable E alified building des 7-16; Pr=20.0 psf (15); Pf=20.0 psf (s=1.0; Rough Cat (1.10)	in the p nd (norm nd Deta signer as (roof LL Lum DC B; Fully	lane of the tru al to the face) ils as applicat s per ANSI/TF .: Lum DOL=1 DL=1.15 Plate Exp.; Ce=0.9	ss ble, Pl 1. I.15 ;	17) Har pro Ib d des res LOAD (1) De In	nger(s) o vided su lown and ign/sele ponsibili CASE(S ead + Sr crease=	or othe officient d 82 lb ction o ty of ot ty of ot) Sta now (ba 1.15	r connection devi to support conce up at 4-9-12 on f such connection hers. ndard alanced): Lumber	ce(s) shall be entrated load(s) 201 top chord. The n device(s) is the r Increase=1.15, Plate
BOT CHORI	 Rigid ceiling directly bracing 	applied or 10-0-0 oc	5)	Unbalanced design.	snow loads have b	been cor	nsidered for th	is	Ur	hiform Lo Vert: 1-	oads (l 2=-60.	b/ft) 2-4=-60. 5-6=-11	15. 9-10=-20. 7-9=-20
REACTIONS	6 (size) 7= Mecha 10=3-11- Max Horiz 10=104 (I Max Uplift 7=-49 (LC Max Grav 7=247 (LC	anical, 9=3-11-8, 3 LC 11) 2 11), 9=-83 (LC 14) C 35), 9=491 (LC 36), C 26).	6) 7) 8)	This truss ha load of 12.0 p overhangs no Provide adeo Truss to be fi braced again	s been designed f osf or 1.00 times fl on-concurrent with juate drainage to p ully sheathed from st lateral moveme	or great at roof lo other liv orevent one fac nt (i.e. d	er of min roof bad of 20.0 ps ve loads. water ponding te or securely liagonal web).	live of on J.	Co	vert: 4=	ted Lo	ads (lb)	.,
FORCES	(lb) - Maximum Com	pression/Maximum	9) 10)	Gable studs : This truss ha	spaced at 2-0-0 or s been designed f	c. or a 10.0) psf bottom						
TOP CHORI	Tension 2-10=-229/161, 1-2= 3-4=-72/24, 5-8=0/5 5-6=-11/16, 6-7=-11	=0/40, 2-3=-35/109, 2, 4-5=-178/43, 0/57	11)	chord live loa) * This truss h on the botton	id nonconcurrent v as been designed n chord in all areas	vith any for a liv s where	other live load e load of 20.0 a rectangle	ds. Ipsf					
BOT CHORI WEBS	9-10=-147/126, 8-9= 3-9=-339/175, 2-9=- 5-9=-292/31, 5-7=-2	95/210, 7-8=-97/219 63/82, 3-5=-30/105, 48/131	12)	chord and an Refer to girde	y other members. er(s) for truss to tru	uss conr	nections.	,					
NOTES 1) Unbalan this desi 2) Wind: A: Vasd=11 Cat. II; E zone an cantileve right exp for react DOL=1.0	sed roof live loads have m. SCE 7-16; Vult=130mph 3mph; TCDL=6.0psf; B xp B; Enclosed; MWFR I C-C Exterior(2E) -0-10 r left and right exposed osed;C-C for members ons shown; Lumber DC 0	been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior I-8 to 6-4-4 zone; ; end vertical left and and forces & MWFRS DL=1.60 plate grip	13) 14) 15) 3 16)	 bearing at jo using ANSI/T designer sho Provide mecl bearing plate 7 and 83 lb u This truss is International R802.10.2 ar Graphical pu or the orienta bottom chorce 	Int(s) 10, 9 consider PI 1 angle to grain uld verify capacity nanical connection capable of withsta plift at joint 9. designed in accord Residential Code do referenced star rlin representation tion of the purlin a	ers para n formula of bearin (by oth anding 4 dance w sections dard AN does no along the	a. Building a. Building ing surface. ers) of truss tr 9 lb uplift at jo https://www.superior. 8 R502.11.1 a USI/TPI 1. bt depict the s top and/or	o pint nd ize		C		SEA 0363	L 22 EER. R. L

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GI 11111111 June 14,2023

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	н	Monopitch	6	1	Job Reference (optional)	158937628

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:41 ID:X_hcbChxDcqIIoSveVUtaUz6RjJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



3x5 =



Scale = 1:29.4

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MP	0.64 0.55 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.17 0.14 0.00	(loc) 4-9 4-9 2	l/defl >420 >528 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 22 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHOR BOT CHOR BRACING TOP CHOR BOT CHOR BOT CHOR REACTION FORCES TOP CHOR BOT CHOR NOTES 1) Wind: A Vasd=1 Cat. II; I zone an 2-1-8 to cantilev right exi membe Lumber 2) TCLL: A	 D 2x4 SP No.: 2x4 SP No.: 2x4 SP No.: 2x4 SP No.: 2x4 SP No.: D Structural w 6-0-0 oc pu D Rigid ceiling bracing. S (size) 2 Max Horiz 2 Max Uplift 2 Max Grav 2 (Ib) - Maxim Tension D 1-2=0/18, 2 D 2-4=-122/13 SCE 7-16; Vult= 03mph; TCDL=6 Exp B; Enclosed d C-C Exterior(2 3-0-12, Exterior er left and right o bosed; porch left s and forces & I DOL=1.60 plate SCE 7-16; Pr=2 	22 23 23 2000 sheat rlins, exc 2 directly =0-3-0, 4 =64 (LC ==131 (LC =425 (LC hum Com -3=-106/1 31 =130mph 6.0psf; BC ; MWFRS 2E) -0-10- (2E) 3-0-10- (2E) 3-0-0-10- (2E) 3-0-0-0-10- (2E) 3-0-0-0-0- (2E) 3-0-0-0-0-0- (2E) 3-0-0-0-0-0-0-0-0-0-0-0- (2E) 3-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0-0	L athing directly applie cept end verticals. applied or 10-0-0 oc I=0-1-8 13) C 10), 4=-84 (LC 10) C 21), 4=287 (LC 21) pression/Maximum 123, 3-4=-205/187 (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior (3 - second gust) CDL=6.0psf; h=25ft; S (envelope) exterior (3 - second gust) CDL=6.0psf; h=25ft; S (envelope) exterior (12 to 6-0-12 zone; ; end vertical left and t exposed;C-C for for reactions shown; L=1.60 roof LL: Lum DOL=1	6) 7) d or 8) 9) 10 11 11 LC 11	* This truss h on the botton 3-06-00 tall b chord and an Bearings are capacity of 5 Bearing at jo using ANSI/T designer sho Provide mecl bearing plate 0) One H2.5A S recommende UPLIFT at jt(and does not 1) This truss is International R802.10.2 ar DAD CASE(S)	as been designed n chord in all areas y 2-00-00 wide will y other members. assumed to be: , J 65 psi. int(s) 4 considers p PI 1 angle to grain uld verify capacity nanical connection at joint(s) 4. impson Strong-Tie d to connect truss s) 2 and 4. This con consider lateral fo designed in accord Residential Code s nd referenced stand Standard	for a liv where fit betw doint 4 \$ arallel t formula of beari (by oth connectio rces. ance w sections dard AN	e load of 20.0 a rectangle veen the botto SP No.3 crush o grain value a. Building ng surface. ers) of truss t ctors ing walls due n is for uplift o ith the 2018 : R502.11.1 a ISI/TPI 1.	Dpsf om ning o to only nd		4		OR ESS	
Plate DOL=1. Cs=1.00	DL=1.15); Pf=20 15); Is=1.0; Rou); Ct=1.10).0 psf (Lu igh Cat B	um DOL=1.15 Plate ; Fully Exp.; Ce=0.9	;							11111		SEA 0363	L 22
 Unbalar design. This true load of 	nced snow loads as has been des 12.0 psf or 1.00	have be signed for times flat	en considered for th greater of min roof l roof load of 20.0 ps	is live f on							111.		& RAGINE	ERA
overhar	gs non-concurre	ent with o	ther live loads.									11	C	IL BE IN

- 2) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 1.00 times flat roof load of 20.0 psf on 4) overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom 5) chord live load nonconcurrent with any other live loads.

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GI 11111111

June 14,2023

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	H1	Monopitch	1	1	Job Reference (optional)	158937629

5-2-8

5-2-8

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:41 ID:nv1ri_avzKYzZiWeAl69NZz6RTz-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1



3x5 =

-0-10-8

0-10-8



Scale = 1:28.5

Loading (ps TCLL (roof) 20. Snow (Pf) 20. TCDL 10. BCLL 0. BCDL 10.	 b) Spacing b) Plate Grip DOL b) Lumber DOL c) Rep Stress Incr c) Code c) Code 	2-0-0 1.15 1.15 YES IRC2018/TPI2014	CSI TC BC WB Matrix-MP	0.40 0.38 0.00	DEFL Vert(LL) Vert(CT) Horz(CT)	in 0.08 0.07 0.00	(loc) 4-9 4-9 2	l/defl >732 >905 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 19 lb	GRIP 244/190 FT = 20%	
LUMBER TOP CHORD 2x4 SP No.2 BOT CHORD 2x4 SP No.2 WEBS 2x4 SP No.3 BRACING TOP CHORD Structural wood 5-2-8 oc purlins, BOT CHORD Rigid ceiling dire bracing. REACTIONS (size) 2=0-3 Max Horiz 2=54 Max Uplift 2=-11 Max Grav 2=375 FORCES (lb) - Maximum 1 Tension TOP CHORD 1-2=0/18, 2-3=- BOT CHORD 2-4=-123/134 NOTES 1) Wind: ASCE 7-16; Vult=1300 Vasd=103mph; TCDL=6.0ps Cat. II; Exp B; Enclosed; MV zone and C-C Exterior(2E) z exposed ; end vertical left ar and right exposed;C-C for m MWFRS for reactions showr grip DOL=1.60 2) TCLL: ASCE 7-16; Pr=20.0 p DOL=1.15); Is=1.0; Rough C Cs=1.00; Ct=1.10 3) Unbalanced snow loads hav design. 4) This truss has been designe load of 12.0 psf or 1.00 time overhangs non-concurrent w 5) This truss has been designe chord live load nonconcurrent	sheathing directly applie except end verticals. with applied or 10-0-0 or -0, 4=0-1-8 (LC 13) 7 (LC 10), 4=-68 (LC 10) 5 (LC 21), 4=232 (LC 21) Compression/Maximum 09/124, 3-4=-165/162 mph (3-second gust) f; BCDL=6.0psf; h=25ft; /FRS (envelope) exterior one; cantilever left and ri ght exposed; porch le embers and forces & ; Lumber DOL=1.60 plat basf (roof LL: Lum DOL=1 if (Lum DOL=1.15 Plate at B; Fully Exp.; Ce=0.9 e been considered for th d for greater of min roof I s flat roof load of 20.0 ps ith other live loads. d for a 10.0 psf bottom t with any other live load	 6) * This truss on the botto 3-06-00 tall chord and a 7) Bearings ar capacity of 4 8) Bearing at ju using ANSI/ designer sh 9) Provide met bearing plat 10) One H2.5A recommend UPLIFT at jt and does not 11) This truss is Internationa R802.10.2 a LOAD CASE(S) 	has been designed f m chord in all areas by 2-00-00 wide will ny other members. a assumed to be: , J 565 psi. Dint(s) 4 considers pr TPI 1 angle to grain ould verify capacity of chanical connection e at joint(s) 4. Simpson Strong-Tie ed to connect truss f (s) 2 and 4. This cor designed in accorda I Residential Code s and referenced stand Standard	for a live where fit betw oint 4 S arallel t formula of beari (by othe connection rces. ance wi ections lard AN	e load of 20.0p a rectangle eeen the bottor P No.3 crushi o grain value 1. Building ng surface. ers) of truss to ctors ng walls due to n is for uplift or th the 2018 R502.11.1 an SI/TPI 1.	osf m ng o nly nd		Number of the second seco		SEA 0363	RO 22 E.R. A.L. 14,2023	

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



June 14,2023

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	V1	Valley	1	1	Job Reference (optional)	158937630

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:41 ID:GrzoG?sLG?tXDXYehm59Qqz6RYm-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



10-1-0

3x5 💊





10-1-0

Scale	=	1:31	.9

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MSH	0.50 0.47 0.22	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a -0.01	(loc) - - 9	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 36 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD WEBS	$\begin{array}{l} 2x4 \; SP \; \text{No.2} \\ 2x4 \; SP \; \text{No.2} \\ 2x4 \; SP \; \text{No.3} \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\$	eathing directly applie / applied or 6-0-0 oc , 3=10-1-0, 4=10-1-0 C 10) C 21), 3=-1 (LC 15), C 15), 9=-1 (LC 15), C 20), 3=4 (LC 21), LC 21), 9=4 (LC 21) npression/Maximum -167/633 -468/147	4) 5) ed or 6) 7) 8) 9) , 9) 10 11	TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct: Unbalanced design. Gable requir Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall h chord and ar 0) Provide mec bearing plate joint 1, 1 lb u uplift at joint) This truss is International R802.10.2 a	57-16; Pr=20.0 ps 1.15); Pf=20.0 ps 1.15); Pf=20.0 ps 1s=1.0; Rough Cat =1.10 snow loads have I es continuous bott spaced at 4-0-0 or is been designed ad nonconcurrent has been designed n chord in all area by 2-00-00 wide with y other members. hanical connection e capable of withst uplift at joint 3, 72 I 3. designed in accor Residential Code nd referenced star Standard	f (roof LL (Lum DC B; Fully been cor cor a 10.0 with any f for a liv s where ill fit betw n (by oth anding 1 b uplift a dance w sections ndard AN	L: Lum DOL= DL=1.15 Plate Exp.; Ce=0.1 Insidered for t and bearing. 0 psf bottom other live load of 20.1 a rectangle ween the bott lef2 lb uplift ai though 4 and s R502.11.1 a NSI/TPI 1.	1.15 e) e); his ds. Opsf om to t 1 lb					
NOTES													111.

1) Unbalanced roof live loads have been considered for this design.

Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 7-1-6, Exterior(2E) 7-1-6 to 10-1-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60

3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11** Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



С

818 Soundside Road Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	V2	Valley	1	1	Job Reference (optional)	158937631

2-0-14

-0-0

2-4-9

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:41 ID:?Usr2Y2FtIY_pBJEDaKNjnz6RVy-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:26.5

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL	(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	8/TPI2014	CSI TC BC WB Matrix-MP	0.23 0.24 0.07	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 4	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 24 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD OTHERS BRACING TOP CHORD BOT CHORD REACTIONS	2x4 SP No.2 2x4 SP No.2 2x4 SP No.3 Structural wood she 7-1-0 oc purlins. Rigid ceiling directly bracing. (size) 1=7-1-0, i Max Horiz 1=-52 (LC Max Uplift 1=-8 (LC (LC 14) Max Grav 1=103 (LI 4=495 (LI	eathing directly applie v applied or 6-0-0 oc 3=7-1-0, 4=7-1-0 C 10) 21), 3=-9 (LC 15), 4= C 20), 3=103 (LC 21) C 20)	4) 5) d or 6) 7) 8) 9) 51	TCLL: ASCE Plate DOL=1 DOL=1.15); Cs=1.00; Ct: Unbalanced design. Gable requir Gable studs This truss ha chord live loa * This truss h on the bottor 3-06-00 tall h chord and ar)) Provide mec bearing plate	7-16; Pr=20.0 psf I.15); Pf=20.0 psf I.15); Pf=20.0 psf (Is=1.0; Rough Cat =1.10 snow loads have b es continuous both spaced at 4-0-0 oc as been designed f ad nonconcurrent v as been designed m chord in all areas by 2-00-00 wide wil by other members. hanical connection a canable of withst?	(roof LL Lum DC B; Fully been cor om chor c or a 10.0 vith any for a liv s where Il fit betw (by oth anding 8	.: Lum DOL=' DL=1.15 Plate Exp.; Ce=0.9 nsidered for th d bearing. D psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss to b uplift at joi	1.15); ds.)psf om o					
FORCES TOP CHORD BOT CHORD WEBS NOTES	(lb) - Maximum Con Tension 1-2=-98/224, 2-3=-9 1-4=-160/127, 3-4=- 2-4=-347/163	npression/Maximum 18/224 •160/127	11 LC	1, 9 lb uplift 1) This truss is International R802.10.2 a DAD CASE(S)	at joint 3 and 51 lb designed in accord Residential Code nd referenced stan Standard	uplift at dance w sections dard AN	joint 4. ith the 2018 \$R502.11.1 a ISI/TPI 1.	nd					

- Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 4-1-6, Exterior(2E) 4-1-6 to 7-1-6 zone; cantilever left and right exposed; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.





Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	V3	Valley	1	1	Job Reference (optional)	158937632

2-0-8

2-0-8

2x4 🍫

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:42 ID:qeD6lc60S8J8Y6mOaqRnz2z6RVs-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

> <u>3-7-13</u> 1-7-5

Page: 1







4-1-0

2x4 💊

Scale = 1:23.5

Plate Offsets (X, Y): [2:0-2-8,Edge]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	/TPI2014	CSI TC BC WB Matrix-MP	0.13 0.11 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 12 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHOR BOT CHOR BRACING TOP CHOR BOT CHOR BOT CHOR REACTION FORCES TOP CHOR BOT CHOR NOTES 1) Unbalar this des 2) Wind: A Vasd=1 Cat. II; f zone an exposed membei Lumber 3) Truss c only. Fo see Stai or consuit 4) TCLL: A Plate Do DOL=1. Cs=1.00 5) Unbalar design. 6) Gable re	 2x4 SP No Structural 4-1-0 oc p Rigid ceilin bracing. (size) Max Horiz Max Uplift Max Grav (Ib) - Maxi Tension 1-2=-276/ D 1-3=-71/22 ced roof live lo gn. SCE 7-16; Vull SCE 7-16; Vull SCE 7-16; Pre- bol 1-60 platesigned for with or studs exposed dard Industry SCE 7-16; Pre- DL=1.15); Pf=2 (signed for with resting exposed and forces & DOL=1.15); Pf=2 (signed for with sce 7-16; Pre- DL=1.15); Pf=2 (b); Is=1.0; Ro (c); Ct=1.10 (c); c); Ster 1.0; Ro (c); Ct=1.10 (c); C); Ster 1.0; Ro 	22 22 wood sheat urlins. ng directly 1=4-1-0, 3 1=-28 (LC 1=-15 (LC 1=-15 (LC 1=-15 (LC 1=-15 (LC 1=-189 (LC mum Com 101, 2-3=-2 20 bads have ==130mph -6.0psf; BG -6.0psf; BG -6.0psf; BG -6.0psf; BG -6.0psf; BG -0.0psf; BG -0.0psf (L1 -20.0 psf (L1) -20.0 psf (L1) -2	athing directly applie applied or 10-0-0 oc 3=4-1-0 10) 14), 3=-15 (LC 15) 20), 3=189 (LC 21) pression/Maximum 276/101 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior cantilever left and ri pht exposed;C-C for for reactions shown; L=1.60 the plane of the trus (normal to the face) d Details as applicab gner as per ANSI/TP roof LL: Lum DOL=1 um DOL=1.15 Plate ; Fully Exp.; Ce=0.9; en considered for thi n chord bearing.	7) 8) 9) d or 11) LO LO ss , le, 11. .15 ; is	Gable studs s This truss ha chord live loa * This truss h on the botton 3-06-00 tall b chord and an Provide mecl bearing plate 1 and 15 lb u This truss is (International R802.10.2 ar AD CASE(S)	spaced at 4-0-0 oc s been designed fo d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide wil y other members. nanical connection capable of withsta plift at joint 3. designed in accorc Residential Code s d referenced stan Standard	c. or a 10.0 vith any for a liv s where I fit betw (by oth anding 1 dance wi sections dard AN) psf bottom other live load e load of 20.0 a rectangle veen the botto ers) of truss t 5 lb uplift at ju th the 2018 R502.11.1 a SI/TPI 1.	ds. psf p point nd				SEA 0363	EER. K
													Julie	; 14,2020



Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	V11	Valley	1	1	Job Reference (optional)	158937633

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:42 ID:AfCji4WKk_AUC2bLvHz8jpz6RQA-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

Page: 1

= 20%



12-2-0

0		0.5
Scale	= 1	1:35

Loading	(p	osf) Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20	0.0 Plate Grip DO	L 1.15		TC	0.30	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)	20	0.0 Lumber DOL	1.15		BC	0.12	Vert(TL)	n/a	-	n/a	999		
TCDL	1(0.0 Rep Stress Inc	or YES		WB	0.08	Horiz(TL)	0.00	5	n/a	n/a		
BCLL	(0.0* Code	IRC20	18/TPI2014	Matrix-MSH								
BCDL	10	0.0										Weight: 46 lb	FT = 20 ⁶
LUMBER			3) Truss desig	ned for wind load	ls in the p	lane of the tr	uss					
TOP CHORD	2x4 SP No.2			only. For stu	ids exposed to w	ind (norm	al to the face	e),					
BOT CHORD	2x4 SP No.2			see Standard	d Industry Gable	End Deta	ils as applica	ble,					
OTHERS	2x4 SP No.3			or consult qu	alified building d	esigner a	s per ANSI/T	PI 1.					
BRACING			4) TCLL: ASCE	7-16; Pr=20.0 p	sf (roof LL	.: Lum DOL=	1.15					
TOP CHORD	Structural woo	d sheathing directly a	oplied or	Plate DOL=1	.15); Pf=20.0 ps	f (Lum DC	DL=1.15 Plate	9					
	6-0-0 oc purlin	S.		DOL=1.15);	Is=1.0; Rough Ca	at B; Fully	Exp.; Ce=0.	9;					
BOT CHORD	Rigid ceiling di	irectly applied or 10-0-	-0 oc	Us=1.00; Ct=	=1.10	hoon oor	oidorod for t	hio					
	bracing.		5	design	Show loads have	been cor	Isidered for t	1115					
REACTIONS	(size) 1=12	2-2-0, 5=12-2-0, 6=12	-2-0,) Gable requir	es continuous bo	ttom chor	d bearing						
	7=1	2-2-0, 8=12-2-0	7	 Gable studs 	spaced at 4-0-0	DC.	a bearing.						
	Max Horiz 1=-9	92 (LC 10)) This truss ha	is been designed	for a 10.0	0 psf bottom						
	Max Uplift 1=-1	19 (LC 10), 6=-107 (LC	C 15),	chord live loa	ad nonconcurren	t with any	other live loa	ids.					
	8=-1	109 (LC 14)	a) a 440 g) * This truss h	nas been designe	ed for a liv	e load of 20.	Opsf					
	Max Grav 1=7	3 (LC 24), 5=57 (LC 2	3), 6=442	on the bottor	n chord in all are	as where	a rectangle						
	(LC 20)	21), 7=278 (LC 20), 8	=442 (LC	3-06-00 tall b	y 2-00-00 wide v	vill fit betv	veen the bott	om					
505050	(11.)	. O		chord and ar	ny other member	s.							
FORCES	(ID) - Maximum	n Compression/iviaxim	um 1	Provide mec	hanical connection	on (by oth	ers) of truss	to					
	1-205/81 2-4	3-177/03 3-1-177/0	33	bearing plate	capable of with	standing 1	9 lb uplift at	joint					
TOP CHORD	1-2=-95/61, 2-	3=-111/93, 3-4=-111/8	,	1, 109 lb upli	ft at joint 8 and 1	07 lb upli	ft at joint 6.						
BOT CHORD	1-8=-22/63 7-8	8=-21/56 6-7=-21/56	1	1) This truss is	designed in acco	ordance w	ith the 2018						
201 0110100	5-6=-21/56	2.700, 07-21700,		International	Residential Cod		5 K502.11.1 8	and				IIIII	1111
WEBS	3-7=-191/16. 2	2-8=-408/173, 4-6=-40	8/173 .	Rou2.10.2 al	nu reierenced sta	anuard An	NOI/TP11.					WHILL CA	D'''
	,	-,		UAD CASE(S)	Standard							· A FI U/	

- 1) Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 9-2-6, Exterior(2E) 9-2-6 to 12-2-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60



SEAL

036322

G mmm June 14,2023 "annununu

Within the state

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	V12	Valley	1	1	Job Reference (optional)	158937634

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:42 ID:esm5vPXyVIILqCAXS_UNG0z6RQ9-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



9-2-0 4-7-0 8-8-13 4-7-0 4-1-13 4x5 =2 2-9-3 3-0-15 12 8 Г 3 -0-0 4 3x5 🍫 2x4 ı 3x5 💊 9-2-0 0.01 D..... - 1 ~ ~ ~ . PLATES GRIP MT20 244/190 Weight: 32 lb FT = 20% \cap Variation SEAL 036322 G mmm

Scale = 1:29.3 ...

Loading		(pst)	Spacing	2-0-0		CSI		DEFL	ın	(IOC)	I/defi	L/d	Ł
TCLL (roof)		20.0	Plate Grip DOL	1.15		TC	0.37	Vert(LL)	n/a	-	n/a	999	L
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.37	Vert(TL)	n/a	-	n/a	999	L
TCDL		10.0	Rep Stress Incr	YES		WB	0.13	Horiz(TL)	0.00	4	n/a	n/a	L
BCLL		0.0*	Code	IRC20	18/TPI2014	Matrix-MSH							L
BCDL		10.0											L
LUMBER				4	I) TCLL: ASC	E 7-16; Pr=20.0 p	sf (roof Ll	L: Lum DOL=	1.15				
TOP CHORD	2x4 SP No	o.2			Plate DOL=	1.15); Pf=20.0 ps	f (Lum DC	DL=1.15 Plate	9				
BOT CHORD	2x4 SP No	o.2			DOL=1.15);	Is=1.0; Rough C	at B; Fully	Exp.; Ce=0.9	9;				
OTHERS	2x4 SP No	0.3			Cs=1.00; Ct	=1.10							
BRACING				5	5) Unbalanced	snow loads have	e been coi	nsidered for t	his				
TOP CHORD BOT CHORD REACTIONS	Structural 9-2-0 oc p Rigid ceili bracing. (size) Max Horiz Max Uplift Max Grav	l wood shea ourlins. ing directly 1=9-2-0, 3 1=-68 (LC 1=-35 (LC 4=-72 (LC 1=120 (LC 4=701 (LC	athing directly applied applied or 6-0-0 oc 3=9-2-0, 4=9-2-0 10) 21), 3=-35 (LC 20), 14) 2 20), 3=120 (LC 21), 2 21)	lor 7 8 9	 design. Gable requi Gable studs This truss h chord live lc * This truss on the botto 3-06-00 tall chord and a Provide menene 	res continuous bo spaced at 4-0-0 as been designer ad nonconcurren has been design m chord in all are by 2-00-00 wide ny other member chanical connecti	ottom choi oc. d for a 10. t with any ed for a liv eas where will fit betv s. on (by oth	rd bearing. 0 psf bottom other live loa re load of 20.0 a rectangle ween the bott ters) of truss f	ads. Opsf om to				
FORCES TOP CHORD BOT CHORD WEBS	(lb) - Max Tension 1-2=-109/ 1-4=-207/ 2-4=-534/	imum Com /349, 2-3=- /138, 3-4=-; /208	pression/Maximum 109/349 207/138	1	1, 35 lb upli 1) This truss is Internationa R802.10.2 a	t at joint 3 and 72 designed in acco Residential Cod nd referenced st Standard	2 Ib uplift a ordance w e sections andard AN	at joint 4. vith the 2018 s R502.11.1 a NSI/TPI 1.	and				
NOTES				-									
 I had a law a 	a di na affiti na d	a a da la avia	In a second state of the second the second										

- Unbalanced roof live loads have been considered for 1) this design.
- Wind: ASCE 7-16; Vult=130mph (3-second gust) 2) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior(2E) 0-0-6 to 3-0-6, Exterior(2R) 3-0-6 to 6-2-6, Exterior(2E) 6-2-6 to 9-2-6 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.

818 Soundside Road Edenton, NC 27932

June 14,2023

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Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	V13	Valley	1	1	Job Reference (optional)	158937635

3-1-0

Carter Components (Sanford), Sanford, NC - 27332,

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:42 ID:IKj2z0KoemxLayU_7484GEz6RNr-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

5-8-13



6-2-0





6-2-0

Scale = 1:25.3

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Loading		(psf)	Spacing	2-0-0		CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)		20.0	Plate Grip DOL	1.15		TC	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
Snow (Pf)		20.0	Lumber DOL	1.15		BC	0.17	Vert(TL)	n/a	-	n/a	999		
TCDL		10.0	Rep Stress Incr	YES		WB	0.06	Horiz(TL)	0.00	4	n/a	n/a		
BCLL		0.0*	Code	IRC201	8/TPI2014	Matrix-MP								
BCDL		10.0											Weight: 21 lb	FT = 20%
LUMBER				5)	Unbalanced	snow loads have b	been cor	sidered for th	nis					
TOP CHORD	2x4 SP No.	2		,	design.									
BOT CHORD	2x4 SP No.	2		6)	Gable requir	es continuous botto	om chor	d bearing.						
OTHERS	2x4 SP No.	3		7)	Gable studs	spaced at 4-0-0 oc		Ū						
BRACING				8)	This truss ha	s been designed for	or a 10.0) psf bottom						
TOP CHORD	Structural w	vood she	athing directly applie	d or	chord live loa	ad nonconcurrent v	vith any	other live loa	ds.					
	6-2-0 oc pu	rlins.	annig anoon) appno	9)	* This truss h	as been designed	for a liv	e load of 20.0)psf					
BOT CHORD	Rigid ceiling	g directly	applied or 6-0-0 oc		on the bottor	n chord in all areas	s where	a rectangle	m					
	bracing.				chord and ar	v other members			2111					
REACTIONS	(size) 1	=6-2-0, 3	3=6-2-0, 4=6-2-0	10) Provide mec	hanical connection	ı (bv oth	ers) of truss to	0					
	Max Horiz 1	=45 (LC	11)		bearing plate	capable of withsta	anding 3	b uplift at joi	int					
	Max Uplift 1	=-3 (LC 1	14), 3=-10 (LC 15), 4	l=-39	1, 10 lb uplift	at joint 3 and 39 lt	b uplift a	it joint 4.						
	May Cray 1	LC 14)	20) 2 00 (1 0 24) 4	102 11) This truss is	designed in accord	dance w	ith the 2018						
		=98 (LU	20), 3=98 (LC 21), 4	=403	International	Residential Code	sections	R502.11.1 a	nd					
FORCES	(h) Movim		proceion/Movimum		R802.10.2 a	nd referenced stan	dard AN	ISI/TPI 1.						
FURCES	(ID) - Maxin Tension		pression/waximum	LO	DAD CASE(S)	Standard								
TOP CHORD	1-2=-96/17(0 2-3=-96	6/170											
BOT CHORD	1-4=-125/10	07.3-4=-7	125/107											
WEBS	2-4=-270/13	35												
NOTES														
1) Unbalanc	ed roof live loa	ads have	been considered for											(T))
this desig	n.													
2) Wind: AS	CE 7-16; Vult=	=130mph	(3-second gust)										IN TH UA	Bolly
Vasd=103	3mph; TCDL=6	6.0psf; B0	CDL=6.0psf; h=25ft;									S.	A	and the second
Cat. II; Ex	p B; Enclosed	i; MWFR	S (envelope) exterior	r								61	U. FESO	Children in
zone and	C-C Exterior(2	2E) zone;	cantilever left and r	ight							4		the second	
exposed ;	end vertical le	eft and rig	ght exposed;C-C for								-			
members	and forces &	MWFRS	for reactions shown;										SEA	1 1 2
Lumber D	UL=1.60 plate	e grip DO	L=1.60									:	OLA	5. 5
3) Truss de	signed for wine	d loads in	the plane of the true	SS							=		0363	22 :
only. For	Siuds expose		(normal to the face)	, 							-	6		1 E -
see Stand	and moustry C			11 11								2	·	- 1 E
		20 0 nef /	$roof [1] \cdot [um DO! = 1$	15								20	N. SNOW	Ethick
Plate DOI	-1 15) Pf-20	0.0 psi (i 0 nef (i i	um DOI -1 15 Plate	.15								1	A. GIN	5. CA .
DOI = 1.1	5): Is=1 0: Rou	uch Cat R	S Fully Exp · Ce=0.9									1	CA C	II BEIN

- Lumber DOL=1.60 plate grip DOL=1.60 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- TCLL: ASCE 7-16; Pr=20.0 psf (roof LL: Lum DOL=1.15 4) Plate DOL=1.15); Pf=20.0 psf (Lum DOL=1.15 Plate DOL=1.15); Is=1.0; Rough Cat B; Fully Exp.; Ce=0.9; Cs=1.00; Ct=1.10

818 Soundside Road Edenton, NC 27932

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June 14,2023

Job	Truss	Truss Type	Qty	Ply	14 Serenity-Roof	
23050105-01	V14	Valley	1	1	Job Reference (optional)	158937636

Run: 8.63 S Apr 6 2023 Print: 8.630 S Apr 6 2023 MiTek Industries, Inc. Wed Jun 14 09:03:43 ID:7U4JE3OZEciVIty7UKFUVUz6RNI-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

2-8-13

1-1-13

3 - 2 - 0

Page: 1





3-2-0

1-7-0

1-7-0

2x4 💊

Scale = 1:24.2

Plate Offsets (X, Y): [2:0-2-8,Edge]

Loading TCLL (roof) Snow (Pf) TCDL BCLL BCDL		(psf) 20.0 20.0 10.0 0.0* 10.0	Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC2018	3/TPI2014	CSI TC BC WB Matrix-MP	0.08 0.08 0.00	DEFL Vert(LL) Vert(TL) Horiz(TL)	in n/a n/a 0.00	(loc) - - 3	l/defl n/a n/a n/a	L/d 999 999 n/a	PLATES MT20 Weight: 9 lb	GRIP 244/190 FT = 20%
LUMBER TOP CHORD BOT CHORD BRACING TOP CHORD BOT CHORD BOT CHORD REACTIONS FORCES TOP CHORD BOT CHORD BOT CHORD NOTES 1) Unbalance this design 2) Wind: ASC Vasd=103 Cat. II; Exp zone and C exposed ; umber DC 3) Truss des only. For : see Stand or consult 4) TCLL: ASC Plate DOL DOL=1.15 Cs=1.00; C 5) Unbalance design. 6) Gable requ	2x4 SP No 2x4 SP No 2x4 SP No Structural w 3-2-0 oc pu Rigid ceiling bracing. (size) 1 Max Horiz 1 Max Horiz 1 Max Upift 1 Max Grav 1 (lb) - Maxim Tension 1-2=-198/7 1-3=-50/157 ed roof live loa n. CE 7-16; Vult= mph; TCDL=6 p B; Enclosed C-C Exterior(2 end vertical le and forces & 1 DL=1.60 plate signed for win studs expose ard Industry C DL=1.61 Pr=2 .=1.15); Pf=20 (c); Is=1.0; Rou Ct=1.10 ed snow loads	2 2 2 2 2 2 2 2 2 2 2 2 3 3 2 3 2 2 2 3 3 2 2 2 3 2 2 2 3 2 2 2 3 2 2 2 2 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2	athing directly applied applied or 10-0-0 oc 3=3-2-0 11) 14), 3=-12 (LC 15) 2 20), 3=143 (LC 21) pression/Maximum 98/75 been considered for (3-second gust) CDL=6.0psf; h=25ft; S (envelope) exterior cantilever left and ri pht exposed;C-C for for reactions shown; L=1.60 the plane of the trus (normal to the face), d Details as applicab gner as per ANSI/TP roof LL: Lum DOL=1.15 Plate ; Fully Exp.; Ce=0.9; en considered for thi n chord bearing.	7) 8) 9) d or 10 11 LC ght ss le, 1.1. .15 s	Gable studs 3 This truss ha chord live loa * This truss h on the botton 3-06-00 tall b bchord and an) Provide mecl bearing plate 1 and 12 lb u) This truss is o International R802.10.2 ar	spaced at 4-0-0 oc s been designed for d nonconcurrent w as been designed n chord in all areas y 2-00-00 wide will y other members. nanical connection capable of withsta plift at joint 3. Jesigned in accord Residential Code s d referenced stand Standard	or a 10.0 vith any for a liv s where I fit betw (by oth anding 1 dance w sections dard AN) psf bottom other live loa e load of 20.0 a rectangle veen the botto ers) of truss t 2 lb uplift at ju ith the 2018 R502.11.1 a ISI/TPI 1.	ds.)psf om oint nd				SEA 0363	EER. Humin
													June	9 14,2023



